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No. 2323

United States
Circuit Court of Appeals

For the Ninth Circuit.

Transcript of Record.
(IN FOUR VOLUMES)

LOUIS MASON, L. O. CLARK, JOHANNA
FARLIN, C. C. CLARK, L. P. FORES-
TELL, A. F. BUSHNELL, JOHN DOLAN,
PAT LEROUS, J. T. FITZGERALD, and
ELIZABETH BROWN,

Appellants,

vs.

WASHINGTON-BUTTE MINING COMPANY,
a Corporation,

Appellee.

VOLUME IV.

(Pages ~~1291~~ to 1778, Inclusive.)

1543

Upon Appeal from the United States District Court for
the District of Montana.

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(Testimony of Dennis Kennedy.)

with me. [1248] It took me about an hour or an hour and a half to make the examination; I returned to town about four o'clock. Quartz is lead matter, and ore; of course there is different kinds of ore mixed through it; in the case of quartz, you have ore, if it is mineralized, more or less, and in the case of granite you have ore, if it is mineralized sufficiently; you have granite in your ledge very often, and in the case of aplite if it is mineralized sufficient, you have ore. The first thing to be considered with reference to a vein is as to whether you have a fissure or not; without a fissure or without a crevice of some kind it does not make any difference how mineralized the material is, you have not a vein; having a vein, or having the fissure, rather, you very seldom have difficulty in determining the walls; there must be mineralization of the rock,—outside of the walls at times; if you simply have the fissure, pure and simple, with the mineralization confined to the fissure, you have no difficulty in ascertaining the walls; but if, on account of the mineralization of the country outside of the walls of the fissure, and then going back as far as the mineralization extends so as to make it ore, you have more or less difficulty in finding the walls of the vein; the Anaconda mine has shipped a great deal of the ore that has been in the hanging-wall, also in the footwall, that they never worked for ore before, and really it was good too; it could have been shipped then, years ago, too, just the same; this mineralization extending back into the country, and as you get back from the lead, the mineralization de-

(Testimony of Dennis Kennedy.)

creases; and as this mineralization decreases going back, there may be at times, by reason of the price of copper, when you cannot ship and treat one portion of it, and at another time you could treat and [1249] ship that portion,—we suppose it is that way, any way.

I would not say this country rock altered through mineralization that we were speaking about at noon, was lead matter, in my consideration of a vein. I would sometimes consider matter lead matter even if it is not within the walls of a fissure,—sometimes a little bunch I would call lead matter,—outside the walls of a fissure, if it belonged to the lead; I would call that lead matter and not call this matter that we were talking about this afternoon that is mineralized beyond the walls of the lead, lead matter, because the whole thing is not mineralized; this is simply a chunk or something of that kind that I am referring to, that would be lead matter; I have known of instances where it would make a little bunch of it in the hanging-wall, where it would be mineralized enough so that we could save it. I have known of instances for a short distance where the rock outside of the walls of the fissure, by replacement, became ore, and the boundaries of it are beyond the walls of the fissure,—not to extend down; to make a body inside of the hanging-wall,—in the hanging,—that would look like a leach, mineralized, so we could save it; it is beyond the wall of the fissure; you break into the wall and get into the country rock outside of the fissure; I would not necessarily consider that lead

(Testimony of Dennis Kennedy.)

matter; it would be leached or mineralized enough so that we could save it; I suppose it would be lead matter, if it would be rich enough to save, that is, there would be a certain amount of it,—at that certain spot it would; in that case inside of that you would have a wall; there is a wall between the rest of the fissure and the hanging-wall, that would be the hanging-wall and this matter [1250] outside would be mineralized enough so that we could save it; I would not necessarily consider the boundaries on the outside of the matter, that is so mineralized, a wall or a vein; I would not consider it without it extended on down; I would not call it a regular wall; there would be an outside wall, of course, in the case of a pocket, and in that particular case there would be three walls. In the case of lead matter or vein matter, there is not necessarily any particular brand that must exist in order to make it vein matter; there sometimes is a little leaching that brings such ore as we are talking of now in the hanging; where a lead or fissure goes through granite, some of the vein filling is altered granite, and when the vein goes through aplite, generally you expect to find some of the vein filling there,—the aplite on both sides,—to be aplite altered; the granite or the aplite in order to be lead matter would have to contain ore, have to contain mineral, and by ore I have reference to copper; I would expect a hundredth of one per cent, I suppose, of copper in the granite altered to make it ore,—that would be enough to make it ore. In the examination of shaft No. 1 I found decomposed

(Testimony of Dennis Kennedy.)

granite, which is a shattered or softened condition. Defendants' Exhibit 77 is pretty hard, and this other piece too; most of this fine stuff is what comes from between those chunks, little hard chunks that are always through it. I found little stringers through it. By slip I mean a very small seam; I have known of veins that were very small seams at stages of their existence; there was no course of any veins there that I saw; they were running every which way,—cross-ways; there might have been four; that is, there were four or five slips visible in the No. 1 shaft, running in every direction, which is in granite as a rule, [1251] close to the surface; the shaft is in granite; this hard stuff in it, decomposed granite, is in those ribs, mixed up through the hard granite in little lumps; it is everywhere; I could not say how this hardening occurs, and the softening of the granite, in decomposition, to these hard knobs, without it is from surface leaching, from the water going through there that rotted it; this discoloration, this hardening, this alteration, might have been caused by these waters bearing mineral solutions, but I do not think it did, because it has not ever shown anything out in the country rock of the mineral through the water, but I would not expect that beyond the walls; I would not expect this change to occur in the country rock outside of the walls; my reason for not thinking so is that this change is not visible in the country rock outside of the seam; the same condition does not exist in shaft No. 2; that is a little harder ground in shaft No. 2; there is decomposed granite on one

(Testimony of Dennis Kennedy.)

side, a little decomposed granite; the other side is a cleaner rock. The rock does not look to be mineralized, and the only alteration of its constituents is that it is harder rock; there is a little aplite in it; there is a line of cleavage between the two minerals; there is a little harder rock in the foot side in the east end, more like a boulder in there, more like a boulder of this aplite; I do not think Defendants' Exhibit 30 is decomposed granite. You would find that kind of rock in leads sometimes, close to the surface; you will find that most any place in the country close to the surface; *you will find that most any place in the country close to the surface*, and you would also find it in leads close to the surface; that rock has been considerably altered by the leaching; water principally does that; ordinary water, iron stained; if there is copper in [1252] that, I do not know how the ordinary common water would get in there. I cannot find any quartz in that rock, nor any silica.

You sometimes find material like Defendants' Exhibit 57 in leads; there is a little bit of quartz through it, mixed with quartz, decomposed. There is some material a good deal like that in shaft No. 2; that is quartz mixed with granite, little spots of granite in it; I call that quartz and granite in shaft No. 2. If I saw material like that in place in shaft No. 2 I would have a different opinion of shaft No. 2. I saw soft granite in the Hornet shaft; I saw no mineralized granite there; it was all granite; I did not notice any green staining in the shaft; the walls in the cross-cut looked as if they were a little stained,

(Testimony of Dennis Kennedy.)

but this green staining was not visible right in the walls of the shaft. I did not see any material like that (referring to sample) in the Hornet shaft. Defendants' Exhibit 36 is copper staining,—copper stained granite. I do not think I would call that ore, without there is mineral in that; the stain in it comes from the copper; I do not think there is any percentage of copper in that sample; I do not think that would run anything in copper; there is a little copper in that little piece—the sample,—these pieces here (indicating), this piece here (indicating), and that piece,—if you took that out of it,—you can always put a chunk in and get a sample,—that coloring may go through the entire mass; it would not surprise me if you got six or seven per cent copper in that if you put that chunk in; it would surprise me if the others would. I saw no material like that in the Hornet shaft; it was decomposed granite; still, they could get a little chunk in the sides that I would not see, for that matter, but I did not see any chunks in there.

[1253] Defendants' Exhibit 91 is decomposed granite, and you sometimes find that in veins; you find material like this sample in veins; the decomposition is due more or less to water and atmosphere,—the leaching is where it comes from; I can tell it is granite by the looks of it and the color, and then there is a little quartz in it,—mixed with quartz; I could not tell you how the quartz got in there. There is some quartz in granite; at times you find quartz cut through the country rock, in granite,—where it

(Testimony of Dennis Kennedy.)

is cleaned, you won't find it. I could not say that I saw material like that in the Hornet shaft.

Redirect Examination.

(By Mr. SHELTON.)

The WITNESS.—I have found material like Defendants' Exhibit 91 outside of a vein. I have seen something similar to that in a fault fissure. Defendants' exhibit has been acted upon by mineralizing waters,—the water has colored it iron color. The waters that flow over the surface of the ground carry iron sometimes; the iron stained rock similar to that, is sometimes found outside of a vein; that material looks like country rock; that looks like a rock we get close to the surface, until we get down a piece. You find material like Defendants' Exhibit 30 in a vein, and you will find it in the country, find it both places, and close to the surface, at all times here; it might be from a vein or it might be from the country rock; it is not easy to take a piece of iron stained rock like that and tell where it came from simply by observing it; it does not look like it carries any values. The sample you show me is porphyry; this piece here (indicating) resembles it a little bit.

[1254] The rock in the oxidized zone of a vein and which is iron stained does not differ in its appearance very materially from the altered aplite and granite that is also iron stained and is found in the cracks near the surface of bedrock; if I saw them in the place they came from I could tell whether they came from a vein or not; in the oxidized zones in the veins, the rock does not generally show the copper

(Testimony of Dennis Kennedy.)

value. This bastard quartz in shaft No. 2 resembles the quartz of a vein a little, in color,—in its whitish appearance; if you take that rock near the surface, stained over with the iron stain that comes from the surface waters, it is not always easy to distinguish it; that material is country rock, as a rule; if that was in a ledge we would call it ledge matter, and if it was not in place it would be ledge matter just the same, but not in place; it might be ledge matter if it was in a ledge where it forms a vein; I saw material in shaft No. 2 that resembled it. I could not tell simply by its appearance whether that came from a vein or not; I could not tell whether it carried any particular values, or whether it came from a vein or not. Anything that has got mineral in it is ore, but it would not be ore if it was not commercial value. In one place in the Anaconda vein there was a mineralization beyond the original walls of the fissure, and the ore had a light, white appearance. I saw the dark colored specks in Defendants' Exhibit 113,—very little,—big as a shot in places; the material mineralized beyond the walls of the original fissure of the Anaconda vein ran from four to five per cent copper; I saw nothing south of the hanging-wall of the Mullins vein in those cross-cuts that looked like this material.

[1255] Recross-examination.

(By General NOLAN.)

The WITNESS.—The material shipped from the Anaconda on the hanging-wall and into the country was of a whitish color, soft granite.

(Testimony of Dennis Kennedy.)

Q. Well, there were black specks. You say they were not so large as the spots in the sample Defendants' Exhibit No. 133?

By Mr. SHELTON.—No, that is not what he said. We object to that as assuming something that the witness did not say. He said it was lighter, the sample I showed him with the black specks removed.

The WITNESS.—It did not resemble Complainant's Exhibit 31; that is granite; I don't know whether the black spots are removed from that or not,—there are still black specks in there, and as large as marked in the piece of granite that I have been examining here; it looks much the same, only of a softer nature; I have no difficulty in telling that is granite; there is considerable difference between it and Defendants' Exhibit 113,—this is a little lighter; the material shipped from the Anaconda was lighter than that; it had no green shade in it,—that has a green shade in it,—outside of that, that is pretty near as light, and taking away the green shade, the sample resembles in appearance the material that I shipped from the Anaconda; it is not quite as light, that is all; I saw material like this green shaded material in the cross-cut of the Hornet; I saw it all through the cross-cut, on both sides and on the bottom, in both cross-cuts; you will see that all through it. I saw a little cuprite,—oxide of copper, in the examination I made there, in the sides, a little bunch, small pieces; I did [1256] not see any of this red-looking stuff that I said would increase the value of the sample.

(Testimony of Dennis Kennedy.)

Redirect Examination.

(By Mr. SHELTON.)

The WITNESS.—If I had seen a little of that reddish material in either of these cross-cuts, that would not have affected the opinion that I gave as to whether it was a vein or not.

Recross-examination.

(By General NOLAN.)

The WITNESS.—It would affect my judgment if there was enough of this red stuff there to form a vein; if I saw an inch of it, extending as a stringer right from the Hornet discovery shaft on through for twenty-five feet, crossways, or north and south, I would say it was a leader from the vein; it would not be a regular vein. I would consider it vein matter if it had the stringers through there; if it had a little ore in it I would consider it vein matter, but it would not be the regular vein. If the stringer existed there and connected with the vein, it would be a stringer from the vein, but whether it did or not, I did not see it there, and it did not enter into my calculations at all in giving standing to that material.

Redirect Examination.

(By Mr. SHELTON.)

The WITNESS.—When I use the term stringer I mean something connected with the vein, dipping away from the vein. If I had [1257] seen a little fissure or crack on the north side of the Hornet shaft, extending part ways across the shaft and having a very narrow width and being traceable in a northerly direction, almost flat, disappearing into the bot-

(Testimony of Dennis Kennedy.)

tom of that cross-cut a few feet from the Hornet shaft, that would not alter the opinion I gave as to whether there was a vein in the Hornet shaft or in that north cross-cut.

Recross-examination.

(By General NOLAN.)

The WITNESS.—I never did any prospecting, and never located any claims.

(Signed by witness before Examiner February 19, 1912.)

[Testimony of John Mills, for Plaintiff.]

[1258] JOHN MILLS, duly called and sworn as a witness on behalf of the complainant, testified as follows:

Direct Examination.

(By Mr. SHELTON.)

The WITNESS.—My name is John Mills. I live at 805 West Mercury Street. I did the work in shafts 1 and 2 that have been referred to; about the first week in December of last year, referred to on Complainant's Exhibit No. 14,—No. 1 is the westerly one of the two shafts, and when I did the work I took the measurement of the depth of the shaft; when I began the work No. 1 shaft was twelve feet deep,—I measured it exactly, and at that time the bottom of the shaft was in bedrock,—it looked to be about three feet in bedrock, and I sunk it six feet deeper, and when I got through it was eighteen feet deep; the bottom of the shaft was perfectly clean when I began work, and I sunk in solid rock. When I went to shaft No. 2 it was nine feet deep—I measured it,

(Testimony of John Mills.)

and when I went there there was no cave or filling in the bottom of the shaft; I sunk it seven feet deeper, which made the total depth of that shaft sixteen feet.

Cross-examination.

(By General NOLAN.)

The WITNESS.—I was down to bedrock when I started to sink shaft No. 2 deeper; when they came to bedrock they quit,—it was not six inches in bedrock; I did not measure to see if it was an inch in bedrock; the bedrock came in from the northeast corner of the shaft, and as soon as the shaft,—what you [1259] call the shaft,—came into the bedrock, they quit. Now, this corner might have been a foot or eighteen inches into this bedrock, right into the black soil or sand, but when they come to the bedrock they quit,—what they would call the shaft. When I commenced to sink there was not any mineral that fell in; it was perfectly clean; there was not any wash on the bedrock at all; the shaft was cleaned clean, just like as if somebody had worked there a short time ahead of me, cleaned the shaft out, and there was one set of timber in, with one inch boards for lagging, and it looked like it was done just a short time before I went there, because the boards were all white and clean. There was no wash deposited in Shaft No. 1; somebody had seemingly been working on the shaft a short time before I went there; I don't know who it was; I worked about four days on each shaft for Mr. Kemper; I run a little cross-cut for him, but it was all in the same time;

(Testimony of John Mills.)

that is all I ever worked for him.

Redirect Examination.

(By Mr. SHELTON.)

The WITNESS.—The shafts looked to me like they had been cleaned out for somebody to inspect the shaft, and keep the shaft in order to inspect it any time it was necessary, but I had not seen any work going on there, and I did not see any fresh earth thrown out on top; you see, it had snowed before that, and it was all over snow before I went there to work. The earth in the bottom of the shaft looked as though it had been shortly worked on,—it had a fresh appearance.

(Signed by witness before examiner February 17, 1912.)

[**Testimony of Simeon V. Kemper, for Plaintiff.**]

[1260] SIMEON V. KEMPER, duly called and sworn as a witness on behalf of the complainant, testified as follows:

Direct Examination.

(By Judge BOURQUIN.)

The WITNESS.—My name is Simeon V. Kemper. I live in Butte, and have for about thirty-five years; my business for the last twenty or twenty-five years has been gardening, real estate, banking, mining and other investments; I am connected with a couple of companies that are engaged in the real estate and mining business now. I am vice-president of the complainant in this case, the Washington-Butte Mining Company. I know the part of the Butte & Boston placer which is in controversy here. I have

(Testimony of Simeon V. Kemper.)

known the ground somewhat since 1877 and '78; I have known the ground intimately since 1890, at which time I was one of the locators of the placer claim on the ground,—the Butte & Boston placer. I remember about the time our mineral application was made for said placer, which is in evidence here as May 11, 1891; I only remember it closely by the dates of the papers, but I remember the occurrence; before that date I had not made any very detailed examination; however, I had been all over the ground. I assisted the United States deputy mineral surveyor in surveying that ground, and I had examined the ground in some parts closely in the fall of 1890. Along about May 11, or before or after, 1891, or both, I was out on the ground; I had some work going on over there; I had work going on there in April, and I think the early part of May; I don't know just when they quit. In April, 1891, I was in Washington, D. C., New York, Chicago, and came back to Butte about the 28th. [1261] I paid a lumber bill in July for material that went out there and went into a shaft after I got back and I think the lumber went out there in May or June. After I returned from the east I went out there to see what work was being done, how it was getting along; there were men working there, and they quit shortly after that, about that time, on that shaft; the whole summer of 1891 I was out there off and on. It was in the spring of 1891, when it was filed, I presume, that I first discovered the fact of the adverse claim having been filed against the Butte & Boston placer

(Testimony of Simeon V. Kemper.)

on behalf of the Point Pleasant and the Pleasant View lode claims; I know I visited it a number of times during that summer; I cannot give the dates; every time I went out there it was for the purpose of examining the workings, and I made careful examinations of those workings; I observed that there were several shafts sunk to bedrock on the eastern portion of the ground in the summer of 1891,—I remember distinctly the first day I saw it was quite a warm day; it had been sunk there before I saw it, and they were about eight or ten feet when I first saw them,—some of them were to bedrock; they were scattered around there, and I cannot at this date, identify any particular shaft that I saw at that time as the Hornet, as I know it now, but there is no question but what that was one of them. The shafts that I saw there in the summer of 1891 could all be sunk without a windlass, and the depth would not exceed twelve feet; there may have been one or two there a little more than twelve feet, but the shafts looked like the average shaft that was sunk,—would be sunk by one man without a windlass; I will swear that there was not a shaft on the ground to exceed eighteen feet during the summer of 1891. My inspection of the Butte & Boston placer during [1262] 1891 was sufficient to acquaint me with all the shafts on the ground; I had reference in saying there were no shafts on the ground deeper than eighteen feet, to the workings on the east end of the ground that I spoke of; I had some shafts sunk there in the gravel on the western portion deeper than that.

(Testimony of Simeon V. Kemper.)

Mr. Mason and his associates sunk the shafts on the eastern portion of the ground I speak of. There were no vein showings in any of the shafts on the Butte & Boston placer; where the shafts had reached bedrock the material exposed in the bottom was granite. I descended into them for the purpose of examining them, and I found some good looking float at one of them on the dump and I went down to see where it came from,—the character of the ground; that must have been the Hornet shaft, because I have observed the same material there since. There was no shaft with a bench in it at that time; the first time I observed that bench in the Hornet shaft was in 1901, when we were getting ready for the suit in the district court. I do not know what time in the year; it may have possibly been in the winter of 1890. It was after we found that Mason and Merri-man were working on our ground, and I am not sure whether that was in the late fall or early spring. I remember examining the Pleasant View discovery shaft for the purpose of determining whether there was a lode or lead or vein therein; the first time I had an opportunity to examine the virgin ground, or the ground that had not been caved in, was in 1894 or 1895, and there was no lead there; there was some float in there, some green stain, and there was a boulder in the bottom with an apex—looked like an apex of a vein, or a roof-shaped rock, that I supposed that Mr. Mason and his associates were intending to claim as a lead, and such a claim was made to me by Mr. Mason; [1263] he and his associates claimed they

(Testimony of Simeon V. Kemper.)

had a lead there; Mr. Mason claimed there was a lead in the Pleasant View shaft prior to the determination of the adverse suit in 1895; he did not at that time, in 1895, know that there was any other lead, but he told me at times that he thought a vein might be found out there some day. He did not make any claim prior to 1900, of any other lead, lode or vein on the Butte & Boston placer than that he claimed in the Pleasant View discovery; we probably had a conversation at the Parrot,—I had a number of conversations with Mr. Mason; he was renting a house from me, and I had occasion to talk to him quite often, and the conversation you refer to, no doubt we had, but at that time I did not tell him that there was a lead out there,—that might have been any time before 1897. There was good float out there, but he had no lead to win a case on; he knew nothing about veins, and he was absolutely ignorant of leads, and I knew what a lead was, and I told him so. I told him he was calling float a lead; this was probably some of the conversation had at the smelter; I cannot detail these conversations. I am familiar at this time with all the workings on the Butte & Boston placer. I have examined the deep shaft, No. 21, and it is about five or six feet deep; it looks like decomposed granite exposed by the work in bedrock; there is a great deal of material there that looks like a fault; I don't know what to call it, whether stratification or what you may term lines running northerly and southerly,—that indicates a north and south fault. I have also visited shaft 1, and I observed it

(Testimony of Simeon V. Kemper.)

before it was sunk deeper by Mr. Mills in December, 1911, and the material exposed in the bottom of that shaft at that time was granite, and it is granite since it has been sunk deeper by Mr. Mills; there is nothing therein in the way [1264] of a lead, lode or vein. Shaft No. 2, at the time Mr. Mills started to sink it deeper in December, 1911, showed bedrock; there was nothing in the way of ore or a vein or a lead; it showed a little firmer bedrock after he sunk it deeper, and the material in the bedrock was granite and aplite. Tunnel 30 is in bedrock; the character of the bedrock throughout that tunnel is a very much mixed up, broken up material; there is a good deal of aplite in there; there is no lode or vein in that tunnel. I observed the vein exposed in the north cross-cut and a little farther in in tunnel 31, and I observed the faulting that is conceded to exist in the tunnel about fifty to sixty feet beyond the northerly cross-cut; I did not measure the distance, only I know it is in the tunnel; that fault cuts off the vein west of it; a little beyond the main fault that you speak of there is something that looks like a vein on the north side of the tunnel, and that seems to be cut off by another fault; that last fault mentioned continues diagonally into the face; it is on the south in the face; I have reference to the fault crossing the face diagonally,—runs into the face of the tunnel. I also observed the country in the north cross-cut outside of the vein that is exposed therein; I noticed very little green stain in that; it is granite, altered some; I think I found two or three little spots there; there

(Testimony of Simeon V. Kemper.)

is not much. I observed the material in the southerly cross-cut near the face of the tunnel 31, and there is no evidence of staining with copper therein. I went down the Rabbit discovery shaft and saw a little tunnel started to the west, hardly big enough to dignify by the name of tunnel, hardly large enough, in there; there was a little streak of, or a little seam with some green staining in it, as big as my finger; there was not [1265] enough shown to distinctly show the course; it seemed to strike toward the south or southwesterly; I did not observe it crossing the shaft at all. It seemed nearest to the south side of that little projection at the bottom of the shaft,—I mean the south side of that excavation in the west side. There is no stain to speak of in the country rock in the Rabbit discovery shaft; there is a little streak that has some stain in it; the country rock in that shaft at the bottom is granite. I did not take the course of the vein in the north cross-cut of tunnel 31 with an instrument; I observed it, that is, casually; in going easterly it bore to the south.

I went down shaft 3, and on Defendants' Exhibit 1, marked shaft No. 9, and entered the cross-cut to the north and observed streaks in there they call veins,—may be a vein; the first one, on going toward the north, was about an inch or two, possibly less than an inch in some places. It first appeared in the cross-cut four feet from the timber; beyond it lay the granite,—was a little more altered, and a few feet to the north of it there seemed to be another streak or seam; there is no lead in the shaft; the country rock

(Testimony of Simeon V. Kemper.)

in the shaft and the cross-cut connected with it is granite; in the shaft itself I did not observe any green staining; there is some green stain in the cross-cut that I mentioned and also in the cross-cut below the one I mentioned. The cross-cut below appears to be a cave-in; I don't know what it is; I did not see the work done; it may be a cave, or it might have been originally a cross-cut; it is a large opening to the north, and it has a slip or fault that bears northeasterly and southwesterly, or nearly northerly and southerly, with considerable dip to the west, and there is very little green staining visible in that lower working. [1266] I did not visit the Vesuvius shaft and workings. I was down in shaft 19. When I was in there the bottom was covered with loose debris that had caved in and the top of bedrock was perhaps nearly as high as my head, say five feet; there is no lead, lode or vein in there; there is some granite, some little patches of quite green-looking granite, and there is considerable crushed up matter; there is clay faulting matter. There was the clay crushed-up material in the apparent course of the streaks running northerly and southerly in shaft 19 which indicated faulting; by the streaks I mean the planes of the fault itself,—the lines that were marked, and their course was northerly and southerly; I did not take their direction. Tunnel 35 is mostly in wash, in the east end of it,—the face is a few feet in bedrock, about two and a half or three feet; it looked to me like aplite; there is no lead, lode or vein in that. In tunnel 36 I observed the same

(Testimony of Simeon V. Kemper.)

kind of bedrock, only a great deal more of it; tunnel 36 runs in a great deal farther, and it has several branches; I visited all of its branches; there is no lead, lode or vein in that tunnel or in any of its branches or workings. I have been in tunnel 37, that being the tunnel below the mouth of the Hornet tunnel, and found granite and a little aplite; I observed a little green stain in the cross-cut toward the north running under the entrance of tunnel 34; there is no lead in that cross-cut or in the tunnel. I have been in tunnel 34, the Hornet tunnel, and through it and been down the inclined shaft, saw them stoping in there, and have followed the vein in the Hornet tunnel to the face of the tunnel, and the walls of that vein are clearly defined; the hanging-wall, with reference to the tunnel itself, is on the south side; in most of the way the [1267] south wall of the tunnel is the south wall of the vein, which is the hanging-wall; that wall is granite, and it is well defined. I have been to the bottom of the Mullins winze, connected with the Hornet tunnel,—that inclined shaft,—I was one of the interested parties when we sunk that shaft, and we let a contract for a hundred feet, and that,—I don't know how deep that shaft is sunk. Mr. Mullins sunk that after this hundred foot contract was finished; there are workings below the floor of the Hornet tunnel connected with that inclined shaft,—there has been some stoping done from the inclined shaft westerly, and now there is a cross-cut in what is called the Hornet shaft northeasterly, tapping the west end of the stoping from this inclined

(Testimony of Simeon V. Kemper.)

shaft; that working was quite extensive, extending down to the bottom, but it has been filled,—the stopping extends to the bottom of the shaft. I have been to the bottom in the inclined shaft and the stopes connected with it; there is a vein all the way from the floor of the tunnel down to the bottom; at the bottom it almost peters out, that is, its values decrease; it was the same vein that is in the Hornet tunnel; the walls as I went down that inclined shaft were well defined, and consisted of granite. I broke in through the material bounding the walls at depth in the inclined shaft, and the character of the material there was granite, and there are some stains in the cracks; other places it is not stained much, very little; there is more staining at bedrock and less staining below; the vein is about the same size all the way down in the shaft, about four feet, at the bottom, but the values decreased to such an extent that they quit sinking. I have also examined and observed the cross-cut from the Hornet tunnel to the Hornet shaft and down the shaft, and to the [1268] cross-cut back northerly, and the material exposed in the upper cross-cut from the Hornet tunnel to the Hornet shaft is granite. Complainant's Exhibit 31 to 36, introduced here as being brought from the workings connected with the Hornet Discovery shaft by Mr. Linforth, look like an average sample, a fair sample of the country rock through that cross-cut,—the material in which the Hornet shaft is sunk is country rock,—granite; there is some mineralization there, and some seams that have been stained. There is a

(Testimony of Simeon V. Kemper.)

crack, a seam, that is stained up somewhat with chrysocolla, and sometimes you find a little cuprite on the east side; there is another one on the west side, and possibly just a little lower, running almost horizontally toward the north or northwest side of the shaft; it seems to bend up a little, and on the northwest side,—what we have been calling the north side here,—about the juncture between bedrock and wash, there is considerable stain; this seems to lay across horizontally east and west; this first horizontal seam that I mentioned, is below the floor of the upper cross-cut, three or four feet; the other one is just about nearly opposite, I guess; it is a little below the floor; on the southwest side that seam is just a crack; some places the stain has extended, making it appear wider than it appears in other places. Those seams are not veins. I observed in the upper cross-cut, going from the Hornet shaft, special mineralization; there is a fault showing in the south,—or in the east side of the bottom of the cross-cut running from the bottom of the Mullins tunnel to the Gulf shaft; there is more staining in that; there is some what they call chrysocolla and more staining in that than there is on either side of it; I found cuprite there,—I am not sure, but I think I have; that fault runs northerly and southerly. [1269] You can get cuprite in spots or places in that upper cross-cut; I think I found cuprite on the west side of that cross-cut,—very small pieces. I have not made an examination of the geological character of that country, knowing that there were geologists who were doing that, and

(Testimony of Simeon V. Kemper.)

so my observations have not been as close as they would have otherwise been; there is some little cuprite there; I remember distinctly, now, of finding on the west side of that upper cross-cut, say a foot above the floor of this cross-cut; it is in very small quantities, and I hardly know how to compare it in quantity,—very small pieces,—some as large as a pea; I observed it along just at the top of bedrock; you might find it most anywhere in there, in very minute particles; there is considerable green staining in some spots. There is not as much of that cuprite visible now as before this hearing opened; it is very nearly all dug out; the last time I was out there it was hard to find any; I don't know of anything else in the Hornet shaft in the way of mineralization,—some little green stain; there is a little pocket or patch of green stain in the southeast corner, not very far above the bottom; I have mentioned the most stained parts in that shaft; I do not know that there is any other stain in it; there is stain in the places I have spoken of. I observed the little drift southwesterly from the bottom of the shaft; that is in granite; there is no mineralization in there; I did not see any staining. The lower cross-cut northeasterly from the bottom of the Hornet shaft to the workings on the Mullins vein or Hornet vein, below the Hornet tunnel, is all granite;—very much more solid than the cross-cut above; there is one place there are two little streaks in [1270] there where I found cuprite on the east side; one of them is about three, possibly three feet,—I did not measure any of them,—

(Testimony of Simeon V. Kemper.)

from the stoping,—and the other one is maybe about a foot or eighteen inches more; those are in the cross-cut; the first one is about three feet from the vein, and the other is, perhaps, about eighteen inches farther; there seems to be a crack that has been filled from percolating mineral waters,—looks that way; I do not know what the strike of that crack could be; it is more horizontal than it is perpendicular, and it leads downward toward the Mullins vein; I am talking about the cracks in the granite. I observed the fault mineralized just beyond the end of the cross-cut in the drift along the vein, at that point; I did not take the course of that fault,—it is northerly and southerly; it is mineralized some; it seems there are deposits of some character in it of chrysocolla. In the lower Horner cross-cut there is a lead where the stoping has been done, but there is none between there and the Horner shaft. The stoping has been done on the vein in the Horner tunnel. I remember an injunction hearing in the state district court in this county between the Butte Land & Investment Company and Mr. Mason and others in 1901; when that hearing commenced there was a connection between the Gulf shaft and the Horner tunnel,—the Mullins tunnel,—whatever you term it. It was run the balance of the way from the Gulf Discovery shaft to the Horner Discovery shaft during that trial. I have seen the maps marked Defendants' Exhibit 2, No. 9,000, which has heretofore been testified to as having been introduced as an exhibit at that hearing by Mr. Mason and his copartners. The blue-print you hand

(Testimony of Simeon V. Kemper.)

me was taken from that tracing; it was taken in the east window of our office, State Savings Bank [1271] Building.

By Judge BOURQUIN.—We offer it in evidence for the purpose of showing the condition and extent of the workings in 1901.

The EXAMINER.—I will mark that Complainant's Exhibit No. 44.

The WITNESS.—When I located the Butte & Boston placer, there was no quartz mining being carried on in that part of the Butte district; the main mines were on the west side of the creek; the Silver Bow mine was perhaps the nearest to the Butte & Boston placer; that was something over a mile or a mile and a half,—about a mile. At the time I visited the Pleasant View Discovery in preparing for the trial of the adverse suits, I encountered Mr. Mason; in getting ready for that adverse suit, I took some witnesses, five altogether, the hack driver and myself and three witnesses, and went out there to examine the Pleasant View Discovery shaft, and I found Mr. Mason out there. He said that we could not go down, and I told him that I had brought those witnesses out there to examine that shaft, and that they were going down, and I argued the question with him, told him there was no use to try to resist, that there were five of us and only one of him, and told my witnesses to go ahead, and I would take care of Mr. Mason, and two of them went down; he was guarding the shaft at that time; there was no ladder there; I cannot remember how we went down, but it seems to

(Testimony of Simeon V. Kemper.)

me we went down on a rope, but I cannot remember how it was, next to the top; there was no windlass up there and no ladders. We did not attempt to go to any other place, and he did not assume to be guarding any other place; there was no other place in question at that time; that was the only place that was claimed there was a lead,—the complainants in the adverse suit claimed there was a lead. Mr. Mason was claiming a lead in the Pleasant [1272] View shaft; he did not talk of anywhere else.

Cross-examination.

(By General NOLAN.)

The WITNESS.—I had been pretty active in business in Butte before 1891, engaged rather extensively in different things,—mining, placer mining and quartz mining, and other enterprises, and I was also engaged in the real estate business. In 1891 I owned considerable real estate in the city of Butte, and a reasonably fair proportion of this real estate was land that, whether by me or somebody else, had been acquired as placer ground, and at that time I was quite active, and quite vigilant in looking around Butte and the neighborhood of Butte for unoccupied land to get title to it, and in 1890 I had knowledge of the existence of this land over there that is now in controversy. The first I learned of the Pleasant View and the Point Pleasant locations was when I was talking of patenting, trying to,—I did not know,—I do not know just what date, but it was when I started in to doing something,—getting a patent,—whether it was after we had it surveyed or before

(Testimony of Simeon V. Kemper.)

or afterwards, I am not sure about that; it was about the time the survey was made. I went on the ground before I made the application for patent, and had it surveyed; application for patent was sometime in the spring of 1891, in the winter,—there was snow on the ground. I put a notice on the ground there in December, 1890. I do not remember that when I first made the application for a patent, there was a rejection of my application. I made an application for placer and clay; I do not remember being advised that the clay did not go, and that enough was not done upon [1273] the ground to authorize the office to accept the application at that time. Mr. Gillie at that time was acting as my attorney in the proceedings that were instituted by me to get title to this ground, and Mr. Wilson was employed by me to make a survey of the ground, before I made the application for the patent, and I was upon the ground with Wilson at the time that he made the survey, and about that time I learned that this ground was located by the claimants of the Pleasant View and the Point Pleasant. I never was in the same office with Mr. Passmore; I owned the business that Mr. Passmore has, and sold it to Mr. Passmore in 1889, and I worked for Mr. Passmore on a salary for thirty days, until he got started, until he learned something about the town; he was a stranger then, and I went to the coast; I was not here in the winter, and I returned in March or April, 1890; when I put my notice upon the ground in December, 1890, I did not know that anybody else was claiming by reason of any pre-

(Testimony of Simeon V. Kemper.)

tended location of the ground, but I knew that fact before the 11th of May, 1891; I don't know just when I found out about that; Mr. Passmore told me, I think it was; it may have been after it was surveyed that I discovered that there were locations there,—quartz locations; we did the work right then when we put the notice up in 1890, in December; we sunk a shaft there; I have forgotten the depth of it, about six feet, I guess,—went through frost; I located a great deal of ground around here; I did not know whether I would get good results from it or not; we never operated this ground as a placer other than representation work; I was acquainted with the corners all over this valley from here south ten miles; I knew the surrounding claims too, and examined them. I don't know just what you mean by being pretty watchful in reference to the condition of [1274] the ground in the immediate neighborhood of Butte in 1890, but I had confidence in Butte's future, and where I could find something that would give the prospect a future value, I would take it up. While there were no quartz mining operations carried on in that portion of the country adjacent to this ground in controversy, I knew, of course, that a great many quartz locations were being made and had been made up to that time, and I knew something of the records, and knew some of the locations over there in the neighborhood of this ground in controversy in December, 1890. There was a man by the name of Booth told me there was some vacant ground over there, and I looked it up on the map and concluded

(Testimony of Simeon V. Kemper.)

to go over and locate it, and located him in on it. At this time, I remember knowing of some of the locations over there at that time; I remember the Lily and the Pacific; I remember something of it. I knew that there were some quartz locations, and a good many of them, over there, and that the ground unoccupied was covered to a large extent by quartz locations. The general idea at that time, when we located that ground, was that the veins ran north and south up in the immediate vicinity of this ground. We could not find a lead to locate on. There was no lead by which we might discover, by which we might locate the lead. That is to say, at the time I, at the instance of Booth, had my attention directed to this ground, and desired to pick it up, had known of any leads upon it, we could have located it as quartz, possibly would; we were prevented from locating it as quartz claims by reason of the fact that we did not see any leads upon which to make a location; we made a close enough observation of the ground at that time for the purpose of enabling us to act in that direction,—we went all over that ground.

[1275] I don't know how close the bedrock comes to the surface on the easterly portion of the ground; it has been demonstrated since that it is not very deep. I knew there were no cuts upon the easterly portion of the ground, before that time, where leads were disclosed; I would have found them if there were. Mr. Booth did not give me the boundaries of the tract he spoke to me about; I immediately looked up the boundaries; he pointed to the map in the office

(Testimony of Simeon V. Kemper.)

and said there was a vacant piece of ground over there,—we had the conversation in his office. Located claims do not usually show upon those mineral maps. We saw claims that had been surveyed, and they were on the map, and there was some vacant ground over there; he told me about it, and I went over and looked it up,—I went over the ground; you cannot tell from a map whether ground is located or not; I don't think that was very long before I put the notice of location upon the ground,—I think it was the same month, probably. The location notice was put on the ground on the 20th day of December, 1890, by myself; I do not remember what I put in that notice,—I would have to see the notice; at that time I did not notice the corners of these two locations, the Pleasant View and the Point Pleasant; I may have seen the corners; I may have noticed the corners, but not to know they were the corners of that; there are odd stakes and stray stakes scattered all over this country; they were much worse then than it is now; people would make a location and abandon it, and a stake might be left there for ten years. If I had seen a stake that would properly indicate the claim to which that stake belonged, I would have looked it up; my principles were such that I would never locate a piece of ground that somebody else was claiming, and if I had seen a stake there that would [1276] indicate it was claimed by somebody else,—I have passed by many a claim where I knew it was spurious. There was a notice posted by or near the Pleasant View shaft, but I did not see that at

(Testimony of Simeon V. Kemper.)

the time I located it,—I found it afterwards.

I was out of the state in the spring of 1891, and returned from the east about the 28th of April, 1891; I was gone something less than thirty days; I don't know just what time I left here. Some work was being done by me upon this ground before the 28th of April, 1891, and undoubtedly before any work was done at all, I was upon the ground and observed where these shafts,—representation shafts, would be sunk, and one of those shafts was in close proximity to the Pleasant View discovery, something less than a couple of hundred feet away,—it was something less than a couple of hundred feet from the Butte & Boston placer discovery; there was a shaft very close to the Pleasant View discovery, but I do not think it was sunk at that time; it was a subsequent year to that that that shaft was sunk; the nearest shaft that I sunk in the spring of 1891, to the Pleasant View discovery, as I afterwards knew it, would be more than a hundred feet; it was northerly,—more than two hundred feet. I do not believe you could see the Pleasant View discovery dump from that point; I am quite sure I saw the discovery dump of the Pleasant View location before that application was made; when I first saw that hole, as I recollect it, it was partly filled with ice and snow and some water and dirt. I saw all of the hole that was visible long before 1905; it had caved in somewhat; I supposed it was a very old hole; it has been developed since that it was a recent hole dug the summer before; my recollection when I first saw it was that it was an

(Testimony of Simeon V. Kemper.)

old hole, which some prospector had been prospecting; [1277] I did not know what it was for; later I saw that notice stuck up by it; I don't remember whether the hole was timbered; it could not have been timbered or it would not have fallen in so readily. I did not, before the 11th of May, 1891, see the discovery of the Point Pleasant; I found out that there was a portion of the ground covered by a location known as the Point Pleasant, but whether before the 11th of May, I cannot say; I cannot recall just when the complaint in the adverse suit was filed; I was satisfied that some of that country was quite deep in wash, without cleaning it out. I saw some good float at what we call the Hornet discovery now,—float that was along the surface of the ground and that comes out of the hole that was made, and as a matter of fact, I saw some ore on the dump there in 1891. I went into the shaft in 1891, when I saw this ore on the dump there to see whether it came from the discovery or not, and what the character was in the bottom, and I reached the conclusion that it was in wash; I think the ore on the dump came out of just on top of bedrock; it was in the bottom of the shaft; there was considerable float there. I did not measure the depth of the shaft in 1891. In 1895 I made thorough examinations of the grounds there, and I knew by reason of those holes not being to bedrock, that there was no lead uncovered,—I knew there was no lead in the Butte & Boston placer. I gave away a third of the ground because it is always cheaper to compromise than it is to pay lawyers, if you can compromise on

(Testimony of Simeon V. Kemper.)

the reasonable basis, and the expenses of a suit would be accumulating the longer the suit is continued, or the more action that is taken in the suit. The compromise was suggested to save the expense that would be incident to the [1278] trial of the case. I think that is the side they preferred, as far as I can remember; we agreed to denominate it a compromise, but we took judgment in that case, but if we call that a compromise, it was upon the basis of dividing the Pleasant View claim into two halves, and, if I recollect correctly, Mr. Mullins preferred the east half; it was Mr. Mullins with whom the compromise was negotiated in the first place. I don't think the openings and the exposures on the eastern part of the ground had anything to do with that portion of the ground being assigned to the quartz claimants, unless it be that everybody presumed that the bedrock was much deeper on the western portion than it was on the eastern portion, and it may be that the other parties expected to mine it for quartz. A great deal of work was done from 1891 up to 1895 by Mason and his associates on the eastern portion of the ground.

Q. And you don't know whether or not any of those openings made in that time tended to disclose the fact that there were leads?

By Judge BOURQUIN.—Objected to as immaterial, in that any leads discovered after May the 11th, 1891, would not at all come within the category of a known lead.

(Testimony of Simeon V. Kemper.)

A. There were no known veins in that ground in 1895.

The WITNESS.—I will not say that there were no veins there,—that there were no known veins,—the public generally did not know of a vein there, and Mr. Mason did not know of a vein there, and I did not know that there was a vein there in 1895. I have an idea of the number of openings on that ground before May 11th, 1891, but I would not swear that there is three or six or ten; I do know that they did not extend into bedrock; I know that for I have been prospecting for a long time, that is, [1279] having something to do with mines, and I knew what bedrock was; some of them may have been as deep as eighteen feet; I said possibly there was one there eighteen feet deep, and I think that is deeper than any shaft that was on the ground in the spring of 1891. I never located the Hornet ground as quartz. I did not go there during the time men were working on the ground before the 11th of May, 1891. At the time I saw this quartz on the dump there, there were no men working there; the time that I first saw that made an impression on my mind because of the fresh dump up there, and I walked up to see what they were, what was being done. There was no one working there at that time; there was some one with me, but I have forgotten who it was. I don't remember how I got down the shaft; I do not think there was a ladder when I went down the first time,—there may have been a ladder,—I don't know; my memory of some things is in a hazy condition, and

(Testimony of Simeon V. Kemper.)

some things are clear. I did not see Mason working on the ground there before the 11th of May, 1891. I did not do anything with the ground after I obtained the patent after this compromise,—things went along there until I learned of the location of the Hornet in 1900. We did not know that that lead which was opened up there in 1900 or 1901, I believe it was, was there until that time,—the value of the ground as quartz or the value of the ground as placer, or the value of the ground for clay or any other purpose was undeveloped; the value was not established and could not be without development, and we had other ground; I could not work all the ground; we did some work on placer; we did not do any work for quartz; we did no work for placer after getting patent. Someone told me that Mason and Merriman had jumped our ground, the first information I had, and it may [1280] have been Mr. Mullins, and it may have been someone else; I don't know who it was; I got the information, and Mr. Mullins and I went over there. I did not know of the location of a portion of the ground as the Lynnea, soon after the compromise was effected, until a year or two afterwards,—I don't know when I did learn that,—a long time afterwards. I learned of the location of the ground by Kift and Knoyle and of the getting of a bond and lease on the property by Mason; the order in which I learned it was that Mason and Merriman were running a tunnel over there; I did not know about that work by Kift and Knoyle until I went over there and found out about the tunnel; at any rate, I learned

(Testimony of Simeon V. Kemper.)

of this discovery by Kift and Knoyle; they went deeper, or cleaned out the Hornet discovery shaft and run to the west, and I knew that in running that way, and in the material that was there, that they had not any discovery.

Q. And yet, as a matter of fact, you had an arrangement, didn't you, to purchase the interest of Kift and Knoyle?

By Judge BOURQUIN.—So as to save putting in continual objections, we would like to have all this go in under the general objection that it happened at a date that would render it immaterial.

The WITNESS.—I had an arrangement to purchase Kift and Knoyle's interest in that property, and we stood behind Kift and Knoyle in the litigation that was instituted by them for the purpose of cancelling the lease and bond that was given to Mason; we did that because sometimes it is cheaper to settle these things out of court than it is in court; I don't remember the exact amount we obligated ourselves to pay for their interest; I think we paid two hundred and fifty dollars cash; then there was a five-hundred dollar payment to be made when [1281] the litigation was adjudicated satisfactorily to us; that is all we were to pay; we did not obligate ourselves to pay in excess of five thousand dollars; I think the first payment was two hundred and fifty dollars in cash.

Q. That you were then to furnish the lawyers, meet the expenses of the litigation that was pending, and then, in the event that they succeeded in winning in

(Testimony of Simeon V. Kemper.)

the District Court, that you would then pay them a thousand dollars, and then, if the case were appealed to the Supreme Court, and if there was an affirmance of the judgment there, so as to get the property, you would pay them four thousand dollars?

By Judge BOURQUIN.—Objected to as based upon an assumption of facts not proven, and incompetent, and as based upon an assumption of facts not proven.

Q. At any rate, you say that that was not the agreement?

A. No,—as you talk about it, the agreement comes more clearly to my mind. I have forgotten what the first payment was, but I believe it was two hundred and fifty dollars, that all of the owners of the Butte & Boston placer joined in to pay to Kift and Knoyle, and the second payment, when you suggested one thousand dollars, was to be paid when the litigation was adjudicated, or a final adjudication of this litigation favorable to Kift and Knoyle, then there was another provision,—I don't know whether it was four thousand dollars or five thousand dollars, to be paid when patent was obtained upon the Hornet location, if such was ever obtained. That was a stipulation or condition that was inserted in that contract at the suggestion of Kift and Knoyle. They insisted upon it, and they expected to get a patent on that, and consequently never paid any more than the first thousand. Where the five hundred dollar payment [1282] came into my mind was this: I entered into an agreement with Kift and Knoyle on behalf of the

(Testimony of Simeon V. Kemper.)

Butte Lead & Investment Company to get the title to the east half, or I mean the west half of that Hornet, which covers the ground in question here in this case, for a consideration of five hundred dollars. There was a five-hundred dollar payment to be made to Kift and Knoyle by the Butte Land & Investment Company for the west half of the Hornet, in case the litigation was adjudicated favorably to Kift and Knoyle. I knew at the time I entered into this agreement with Kift and Knoyle that there was not any known lead upon the ground at the time of the application for the placer patent, and I knew that so far as the Hornet Discovery was concerned there was not any discovery made by them so as to make their location a valid location,—I knew all of these facts. At the time I entered into this agreement with Kift and Knoyle, this lead was uncovered in the Mullins tunnel. I did not know about the tunnel at the time of the lease and bond to Mason; I did not know that lease was made before the lead in the tunnel was discovered or not; I perhaps knew it, but I don't remember now. This work disclosing the lead in the tunnel was done in 1901; I acquired an interest in this ground that I disposed of as a result of the compromise, so that Mullins and I, after this lead was disclosed in the tunnel, prosecuted this work in sinking this Mullins shaft, and I think it was in 1897, I bought an eighth interest in the east third of the Butte & Boston, which we had parted with in 1895; I bought it from Mr. Mason; Mr. Mason had an eighth interest, and I bought Mr. Mason's interest in

(Testimony of Simeon V. Kemper.)

that year, that he has been trying to get back; I acquired some more interest in that property, which I think was after the litigation was begun in 1901. When the work was [1283] prosecuted in the sinking of this inclined shaft my company and I had an undivided eighty interest in the ground. I have not got the returns from the ore that was shipped before the work was suspended that was carried on by Mullins and me; I was not working it at that time; Mr. Mullins was leasing from the remainder of the owners, and he quit work because he said it would not pay to continue it; I don't know whether he disposed of his interest for thirty thousand dollars; it is possible that we did not value the vein and the ore therefrom as highly as our adversaries. I have not been acquiring interests in these quartz locations since then; I did not acquire the Merriman interest; our company acquired an interest; I think it was a twentieth, I am not sure, through a man by the name of Bushnell, contrary to my advice. The Washington-Butte Company has no other interest or is not connected with any other interest than in the locations claimed by the defendants in this case at all; that was the Butte Land & Investment Company that put up the money for Mr. Bushnell to buy a twentieth interest, but Mr. Bushnell never deeded the property so far as I know; the Butte Land & Investment Company advanced the money, as I have learned, since I returned from the east; that is the only interest acquired by any company with which I am connected, or by myself, in this property in controversy, in the quartz

(Testimony of Simeon V. Kemper.)

location made in 1900; I am the principal stockholder of the Butte Land & Investment Company; there are some stockholders outside of my relatives, holding a nominal amount of stock,—small amounts. I learned sometime in 1891 that the Pleasant View and Point Pleasant locations were recorded; I think it must have been before I filed my application for the placer patent. I saw some ore on the Hornet discovery dump in the [1284] summer of 1891; I am not going to say I saw it in sacks, or did not see it in sacks. In talking about this matter I am not sure. Maybe I saw sacks there and maybe I did not. I saw sacks somewhere. It may have been on another piece of ground. In 1891 I was representing and patenting something like twenty different claims; the material I saw there on the dump was of the character of the material that we have in some of the exhibits here as being taken from that shaft now; there was cuprite in it; that attracted my attention; when I saw this material on the dump it was in hot weather; it was not there when I put men to work on the ground, which was before the 28th of April; before I went east I started some men at work on a shaft, and I have forgotten what men they were; I have been trying to figure out who they were, and I cannot; I was working on different claims at that time, maybe a half dozen at least, and I don't know what men were working on that shaft, but I started the work just before I left; I do not remember how much work was done at the time I made the application for the placer patent; I don't think it was all of

(Testimony of Simeon V. Kemper.)

it; I make that point blank. I think there was quite a good deal of work to be done, that is, I am speaking of the amount of work required to be done to obtain patent. We sunk a shaft below the Pleasant View discovery; the Pleasant View discovery is in a little hollow, little draw, little ravine, perhaps thirty feet,—guessing at it, possibly twenty-five feet; we sunk a shaft, and intended to sink it ten feet deeper than the Pleasant View; I don't know just when we sunk that, but it was not early in the spring of 1891; none of the shafts I had sunk were down to bedrock. I think there is a fault in shafts 19 and 21, but I am not sufficiently up in mining to determine whether or not [1285] there is any walls to that fault showing there or not; I think perhaps it is a fault,—a fault would be a fissure, and the material that is there is the material you find in a fault fissure, and there is bound to be some copper in it, considerable iron in there in some places; I would say there is not any other metals carried in the material that is there,—that is, I did not analyze it, and I don't know, but it appears as though it is barren; these fissures that are exposed in those two shafts are north and south fissures; not having seen the walls, I am simply enabled to form that conclusion by the way in which the material lays there,—the lines that are there are running northerly and southerly; there are a good many of those lines there; there are planes there which, some of them are not exactly parallel with the others, but they all tend north and south and they show, evidently, that the direction of that fault must

(Testimony of Simeon V. Kemper.)

be north and south or northerly and southerly. This material found there is considerably altered,—breccia,—it is ground up; it is material that you sometimes find in veins. I don't remember which way the lines run in shaft No. 1, if there are any well-defined lines; I presume there are some, but I am not prepared to say just which direction they run; that material is likewise mineralized, and iron is there, but I do not think there is any copper mineralization there; I did not have the material assayed; there is no evidence of any metalliferous minerals in there that I observed, other than iron. Shaft No. 2 is about in the same condition; I think the lines run somewhat northwesterly and southeasterly in shaft No. 1, what there are there; it is very badly broken up in shaft No. 2; I did not notice what direction it run there; it is just in the bedrock a few feet.

[1286] I saw no copper stain, if that is what you mean by mineralization, in shaft No. 9 or No. 3; there is iron through all that country out there; I attribute all that yellowish or reddish coloring going to the wash, or even in the bedrock, to iron stain. I presume you could find some copper stain in the material on the dump of No. 9; I did not examine for it. There is no evidence of copper stain on the dump of shafts 1 and 2; I examined that incrustation which Mr. Dean, I think it was,—one of your witnesses,—testified was a sulphide, and later changed it,—let me see what he did call it; he called it a copper ore. I examined that closely, and I am satisfied that any analysis,—that there is no copper in it; it was an iron stain. I think it was Mr. Dean; he first called it a

(Testimony of Simeon V. Kemper.)

sulphide, and he afterwards changed it, and I forget what he called it. There is evidence of copper mineralization in that material beyond the Mullins vein, and extending to the Hornet discovery shaft; there is some copper stain, if that is what you mean by mineralization; I did not sample it; I thought you would not take my testimony as to what it runs as seriously as you would disinterested witnesses; therefore I took no samples; I know the conditions that exist there in that particular locality which you mention; it is stained in spots; in places the country rock shows some staining.

Q. And even in the estimate that I give you of one and a half per cent copper value, of that entire mass of matter there is not any of this cuprite at all that we encounter, be it little or much?

By Judge BOURQUIN.—Was your question aimed at all those samples taken in both cross-cuts?

By General NOLAN.—Yes.

[1287] By Judge BOURQUIN.—We object on the ground that it assumes a degree that the evidence does not warrant.

The WITNESS.—In that section that you speak of, it is stained material, but I have not said that there is no cuprite in it; cuprite is not staining. You are assuming the staining independent of the cuprite will run one and a half per cent in that particular section; that is not my assumption; I do not know what it runs, but I know that is copper stained in there. I am not a geologist.

(Testimony of Simeon V. Kemper.)

Redirect Examination.

(By Judge BOURQUIN.)

The WITNESS.—In 1890 and 1891, when I was locating the Butte & Boston placer, I knew of the May Yohe placer on the north, and Jim Murray's placer on the west, and I believe that is called application 888, and the Park City placer on the south; the McQueen placer was there. I heard Mr. Mills' testimony with reference to his deepening shafts No. 1 and 2 in December, 1911. I saw Mr. Mason working on both of those shafts shortly before that, taking out dirt; he said he was cleaning them out; I was in them before Mr. Mills started to deepen them, which was after Mason had been working there, and at that time the shafts exposed clean bottoms; they had been cleaned out; I tried to determine whether they had been sunk deeper or not, but I could not. I gave that ground away on the compromise because I thought that the litigation would probably cost more than the ground given away was worth,—I cannot name the value of the ground in dollars; we did not consider it exceedingly valuable; we thought we were giving [1288] something of moderate value; I had had experience in litigation prior to that time.

Q. What had you found was the general result of litigation in the way of delays and a final settlement, in a general way?

By General NOLAN.—Object to that as immaterial. Anyway, the court will take judicial notice of the fact that all suits are costly and uncertain.

A. Well, I found that lawsuits were costly and

(Testimony of Simeon V. Kemper.)

tedious and uncertain.

The WITNESS.—The litigation had already been pending from 1891 to 1895, when the settlement had been made; of course, during all that time, there was more or less prospecting going on in that side of the district for leads; the bedrock was the most shallow in the portion of the Butte & Boston placer that we gave up, where the wash was most shallow; I don't know how deep the bedrock is. When I learned that Kift and Knoyle had made a location of the Hornet upon the Butte & Boston placer and had given a lease and bond to Mr. Mason, I considered that a cloud on my title, and I knew that we were subject to considerable annoyance on account of what might be,—subject to considerable annoyance on account of locations; in 1895, Mr. Mullins and other owners and myself, were endeavoring to avoid that particular feature in relation to the title by trying to find a lead that we could locate. There was considerable of re-locating or jumping here at that time, over placers. Mr. Merriman came to me and wanted to sell me an interest in some of the lode claims located on the Butte & Boston placer; I told him I did not want it; he had been to me a number of times before, and I told him I did not care to have anything to do with it; there were others in the office, though, that I referred [1289] him to. I said, "Go and see them." He took me at my word and I did not have any further dealings with Mr. Merriman in regard to that. However, this Mr. Bushnell, it seems, thought of buying it, and they brought the abstracts to me,

(Testimony of Simeon V. Kemper.)

brought the abstract down to date and brought it to me, and I looked it over and said, "Don't have anything to do with it; let it alone." I said "He hasn't got what he claims." I don't know how the company came to take it,—it was after I left,—I was on my way east somewhere when the company purchased it, and I learned of it sometime after I returned; I returned last May; the company had not purchased anything,—they put up the money for Mr. Bushnell; I learned here the other day that it was a twentieth, and the amount paid was less than a thousand dollars. It was hot weather when I first saw the ore at what may have been the Hornet dump,—it was after June, 1891. After returning from the east I went over the ground quite often; I was over the ground in June, and I did not see these shafts,—these openings that Mr. Mason has testified to, that he sunk in April or May; had they been there I would have seen them, because they were quite evident to any one that was there on the ground. There was no ore on that dump that I speak of in May, 1891 or I would have seen it there; there was some scattered ore all over that country; the float is covered with ore in spots and places, but I don't know of any ore on any dumps in that vicinity at that time.

Recross-examination.

(By General NOLAN.)

The WITNESS.—I spoke of some placers located in the neighborhood of this ground in controversy in 1891, but I don't know [1290] of them being worked as placers,—the Park City was worked,—

(Testimony of Simeon V. Kemper.)

well, that was before it was located; it extends up into a gulch; the work that I saw done there, I think it was perhaps in '78, was done near where Mr. Mason's house is now; the work done there was regular placer mining, but it did not last long; I don't think there was very much of it done; but that was a great many years before 1891. I don't know of any placer mining work done on the McQueen placer, nor where the Pittsmont is,—the bedrock was too deep, and there was no work done on the May Yohe except the work in order to get patent. I don't know just how many holes were on the ground there before the 11th of May, 1891,—there was the Pleasant View discovery; I don't know of any others; I saw that before the 11th of May, 1891; I don't know of any other except our own; there might have been some little old hole that had been dug years before and caved in, but I don't remember it. If there had been any new holes, I would have observed them; I don't know when I first discovered that hole; it may have been in the latter part of June, 1891; I paid a lumber bill there in July, and we have always made it a practice to pay our bills not later than the month succeeding when the material was obtained. I don't know how many holes were there in June, 1891, that were not there in the 11th of May, 1891. Assuming that it was in July that I saw those holes that Mr. Mason sunk, there would be three there in July,—if I counted them, I don't remember what the result was. I don't remember whether there was a windlass on the Hornet shaft at the time I went there; I saw a windlass

(Testimony of Simeon V. Kemper.)

on a shaft up there in subsequent years; I don't know what year it was, but I think it must have been when we were preparing the evidence for the adverse suit in 1895. I cannot tell how many holes were on the [1291] ground at the end of the year 1891; I would not say how many holes Mr. Mason sunk up there,—perhaps half a dozen, perhaps more; these holes that were sunk by Mr. Mason there, or through him, were sunk after May the 11th, 1891; my recollection is that I was out there right along after I returned from the east the latter part of April, and if those holes had been there in April and May, I would have seen them; I was a little surprised when I saw the holes,—I did not anticipate they were going on,—that kind of holes there. Before May, 1891, I knew the two notices were recorded,—the Pleasant View and the Point Pleasant, and that they covered this ground, and then, of course when I went on the ground, I would be concerned about any excavations that were made there. Getting back from the east on the 27th of April, 1891, and presenting my application for a patent on the 11th of May, 1891, if there was anybody on the ground doing work there between the 27th of April and the 11th of May, I think I would have known it; I was not there every day; I was not watching the ground, but I was there often enough so that I am satisfied I would have known it. This Hornet shaft, as it is now known to me, must have been sunk from the surface of the ground down after the 11th of May, 1891, and so as to those openings that you refer to now, on the northerly lead, as 1, 2 and 9. I made the examin-

(Testimony of Simeon V. Kemper.)

ation of all of these holes that I have spoken of already as a result of which I told you that some of them went to bedrock, at various times; my most recent examination was made a couple of weeks ago,—three weeks ago; I made an examination of them in 1891; I saw all of the holes that were there on the ground in 1891; my first examination was when I was walking over there in 1891, and I saw these fresh dumps and walked over there and [1292] looked at them; I cannot tell when that was,—it may possibly been in June,—I know it was an exceedingly hot day; if it had been there before I would have noticed it, and I don't know how to fix the time,—I don't fix it exactly, and I thought to myself, why, that man don't know what he is doing. Mr. Mason did not know what a lead was; he talked to me about ore over there and all of those things, and I saw that he was a novice in the business, all the time; he was renting a house from me at that time, I believe,—I am not sure about that,—but at various times I saw Mr. Mason and he,—whenever this was mentioned, he would talk about having ore over there, and I says “Why, that don't make any difference; you have got ore; that is all right.” These conversations were probably before this hot day, when my attention was called to this ore; I did not know he had sunk any holes over there at first. Mr. Mason told me about the shovel left in the bottom of the shaft being eaten up with rust; I saw an old shovel there and he said it came out of the bottom; I believe I saw two of them; he was present when we measured the

(Testimony of Simeon V. Kemper.)

shafts, or our witnesses measured the shafts, and I don't remember whether that conversation was at that particular interview or not; I recollect that shaft 1 was something like fourteen feet and 2 was twelve and a half feet; I know he called one of the shafts fifteen feet, and it was fourteen feet, and our man told him it was fourteen, and he seemed to accept the correction.

Redirect Examination.

(By Judge BOURQUIN.)

The WITNESS.—All of those shafts were sunk about three and a half feet square, and they were square shafts, and were sunk [1293] about three and a half feet square, and looked like they were sunk down about eight or ten feet, as was common in those days in representing placer claims; all over this country shafts were sunk eight or ten feet deep by one man, as the most economical way of doing the work. That Hornet shaft is quite a good deal larger now,—at the top it is caved in; it is hard to say,—it is ten or twelve feet across,—but down below it is five or six feet, along about the middle or bottom it is something else,—I don't know,—maybe five feet in the bottom; that shaft has been getting bigger and bigger every time an examination is made; it was made very much larger in 1901. Opposite the floor of the upper cross-cut I think it must be over six feet each way.

(Signed by the witness before examiner February 19, 1912.)

By Mr. SHELTON.—At this time the complainant will rest its case in rebuttal.

[1294] Defendants' Case in Surrebuttal.
[Testimony of Samuel Barker, Jr., for Defendants
(Recalled in Surrebuttal).]

SAMUEL BARKER, Jr., a witness heretofore duly called and sworn on behalf of the defendants, being recalled, testified as follows:

Direct Examination.

(By General NOLAN.)

Q. Mr. Barker, assuming that where the ground in controversy is, through processes of erosion, there has been a wearing away or a destruction of say four or five hundred feet of granite, covering the period of time that geologists would consider necessary to accomplish that, and in this process of erosion, or that is gradually accomplished, there is a loosening or a release of chalcopyrite that may be in the granite, so that, with the chemical changes occurring, or possible of occurrence, this chalcopyrite resolves itself into sulphate of copper, and, having in mind the soluble properties of sulphate of copper, which is carried along and coming into contact with the silica which you consider in the aplite that we are advised abounds there, would you say that it would be possible for that sulphate of copper to become silicate of copper?

By Mr. SHELTON.—Object, as not proper surrebuttal testimony.

A. I should say it would not become silicate of copper, which is chrysocolla, that is, with the ordinary process of erosion which would occur at the surface, and, naturally, would mean cold solutions.

(Testimony of Samuel Barker, Jr.)

Q. And when you make the answer that you do, have you in mind likewise the slow process necessarily going on in this [1295] erosion that removes this five hundred feet of superincumbent material?

Mr. SHELTON.—Same objection, same ground.

A. Yes, sir, I have in mind the geologic eras that would go by, in which time the amount of erosion you mention would be accomplished.

Q. So that, having in mind, then, the conditions submitted in the question put to you, and having in mind this chrysocolla which we find in the material in the ground in controversy, what is your judgment as to whether that chrysocolla is there as the result of ascending solutions or of descending solutions, brought into existence through erosion, as I have stated?

Mr. SHELTON.—Same objection, same ground.

A. I would say the chrysocolla, for the most part, has been brought into being there by ascending solutions. There has been a redeposition, of course, because of erosion by descending waters.

The WITNESS.—Taking Complainant's Exhibit 35 as fairly typical of the material encountered in the cross-cut from the Mullins vein to the Hornet shaft, this green coloring that exists here is chrysocolla; it is copper; and the rock originally, before affected by solutions depositing the copper was granite; there is evidence of change or alteration in that rock; it is very noticeable indeed. I should say that the copper content of any of the three pieces of rock shown me

(Testimony of Samuel Barker, Jr.)

from Exhibit 35 by plaintiff, would run quite high in copper; that it is untrue that the amount of copper, or the copper contents of those rocks is infinitesimally small. The facts that go to prove what I am saying now is that the material has been dry [1296] for a great number of years. If that were below water level the green coloring would probably be ten times as great as it is now. And I took, personally, samples in this very cross-cut from which these rocks came from to see what they would run, because the coloring was so small in those rocks by the copper in them that I told those that were with me that I did not think it would run anything, and I found, much to my surprise, that they were good copper rocks, quite a good deal of copper in them, so that in this cut particularly, or in this vicinity, you cannot, by looking at the rocks, tell what the copper contents is. From a casual looking over of the sample one might say that the amount of copper in either of the rocks would be small as to per cent, but I know that an assay would be surprising to the person who brought the sample here, in so far that it would go very much higher than he ever dreamed of; and I know that from experience I have had from assays made of the material in this very cross-cut which these samples came from.

Cross-examination.

(By Mr. SHELTON.)

The WITNESS.—All of the chrysocolla on the ground in controversy in this case has been caused originally by ascending solutions; there has been a

(Testimony of Samuel Barker, Jr.)

redeposition by descending solutions thereafter, because of erosion, the materials breaking down and the mineral contents being redeposited. I think originally the copper was deposited by the ascending solutions in the form of sulphides and some chalcopyrite; the chalcopyrite has been oxidized, and that material was,—there is probably some copper sulphate occasioned by that breaking down, and the [1297] copper sulphate became dissolved in water; it might have been carried down deeper, where it again became sulphide; I said a part of the chrysocolla came from ascending solutions; as the material came up from below it did come up through fissures and deposited some in the veins, and some, I should say, outside and near to those veins; the hot solutions coming in contact with the silica, or the aplite and the granite, gave us our copper silicate; and it was caused in part by descending solutions. I told you a few minutes ago that those descending solutions were taken down through the material, deep-seated again, and probably changed to sulphides. The copper silicate itself would be,—I think would be washed away, carried away. I do not think any part of the chrysocolla was formed by descending solutions,—not by way of surface erosion; I cannot conceive of chrysocolla being formed where there has been erosion and the copper sulphate cold coming in contact with the silica and aplite in the granite and changing into chrysocolla; I cannot conceive of that at all. I have not observed in the vicinity of the ground in controversy in this case the green stain very generally throughout

(Testimony of Samuel Barker, Jr.)

the granite; on the contrary, I find it only close to the fissures, which would allow the ascent of waters mineralized. I remember the cut that was made by the street railway track when the line was built near or across the ground in controversy, but I did not notice that along that cut, that for the whole distance there was more or less green stain; I have not observed it any place except in the vicinity of veins, and below the wash. You are talking now of the street railway cut,—of wash material entirely, nothing in place. You can find, of course, rounded pieces of material that are green in that wash, that have come down from [1298] the east of the street railway cut, but such is not in place. Ascending solutions produced silicate of copper because they certainly were terribly hot; no man knows what those solutions were when they came up. The ascending solutions made sulphides; your descending solutions would naturally be oxidized at the surface. I was not here when the sulphides were formed, but I take it, from Mr. Winchell's and other experts' opinions, that, yes, there were several sulphides formed,—chalcopyrite,—in his article only a couple of weeks ago he admits that chalcopyrite or copper glance was a primary mineral. That is one of the sulphides; there is a difference between the sulphide of copper in the granite and the sulphide that is produced by the ascending solutions. The copper in the granite was supposed to have been chalcopyrite; in this case chalcopyrite was formed by the ascending solutions, because, certainly, that chalcopyrite never got into the

(Testimony of Samuel Barker, Jr.)

granite from descending solutions; it would seem to have been, from the testimony on all sides,—to have been injected into the granite practically at the time when it became solidified. The chalcopyrite in the granite is the same mineral as the chalcopyrite in the veins; they are both sulphides of copper. The silicate, or the silica of the aplite and the granite certainly would not be broken down by cold solutions, and that the ascending solutions would be the agencies which would bring about the breaking down of the granite itself, and liberating silicic acid, or whatever it might have been, and from that you could get your chrysocolla; in my judgment it is necessary that there should be great heat, in order that the result of the mixture of the substances mentioned would produce chrysocolla; the gases, which are sometimes called the liquids of the ascending solutions also had some [1299] effect in changing the silica of the granite and aplite; I think chrysocolla is insoluble in water at ordinary temperature. It would be leached out. The chrysocolla in the Mullins fissure in my judgment, was formed by ascending solutions. Chrysocolla was formed, and is found to-day in the copper areas of what you call the Butte Hill. On what is called the Anaconda Hill there has been a great oxidation, so that the entire material has been changed. The granite itself has been,—like as if it had been in a furnace, it is so terribly oxidized, practically all the original characteristics of the granite have been changed; that might have come about because of the several immense fissures that you find

(Testimony of Samuel Barker, Jr.)

on the Anaconda Hill. The fissures on the ground in controversy are minute indeed, compared with the fissures on what you term the Anaconda Hill. Oxidation is the result of the action of the air,—that is one of the causes; there might have been other features that occasioned the oxidation of the Anaconda Hill,—and there must have been, because we do not find that condition existing either to the east or west of the area that I talked of; for instance, right here on Main Street, we do not find the same oxidation at all; we find chrysocolla nevertheless, alongside of the veins, and to the east we find chrysocolla in the veins. But the Gagnon fissure, as far as I know, which would be west of the Anaconda Hill, is very much smaller than the fissure we find on the Anaconda Hill. Besides, we have quartz porphyry on the Anaconda Hill. That might have had some effect on the granite, occasioning some of the oxidation that is found there. Wherever I have seen quartz porphyry there has been a great deal of oxidation at the surface. Quartz porphyry is not generally distributed throughout the Butte Hill. Wherever I have noticed [1300] the quartz porphyry I have noticed that oxidation in the same vicinity. For instance, you take the Modoc Hill. That shows it. You take the Anaconda Hill up around the Mountain View, where I have seen a great deal of quartz porphyry; that is characteristic of that section. It would seem that oxidation has had the same opportunity to take place on the ground in controversy in this case as on the Butte Hill, although the Anaconda Hill might have been exposed long ages

(Testimony of Samuel Barker, Jr.)

before the portion of the Butte District which is in controversy here; there is no reason to suppose that it was that I know of at present. In the Mullins fissure there is chrysocolla,—practically all of it is filled with chrysocolla. I have not seen any place on the Butte Hill of a similar deposit of chrysocolla in any fissure; I do not think that anyone else that is capable of testifying to-day could know that condition, either, because those conditions have been destroyed, or were destroyed a great number of years ago; I did not know the veins before there was any work on them. I was underground in the Anaconda in 1885, but they were in sulphides then and had been for a long while; they never worked them on the surface, and whatever deposit was in the sulphides is still there, but now you take the Gagnon vein, that was worked to the surface, and Parrot was worked to the surface, and we find to-day the chrysocolla right alongside of those veins now, but I don't know what they were at the surface. Those were exceptional cases,—the Gagnon and the other veins I mentioned, that were worked at the surface. I never saw chrysocolla in them, but I say the chrysocolla is here to-day alongside of those veins,—might have been some in the veins for all I know; I brought up some samples from alongside those veins; I think I said that the chrysocolla came [1301] from ascending solutions. The copper deposited in the vein and being leached out, and being carried into the adjacent country, would not form chrysocolla from erosion and oxidation. I said that heat was one of the things that I would expect, or

(Testimony of Samuel Barker, Jr.)

one of the features I would expect to find accompanying ascending solutions. I have never conducted any experiment, using silica disintegrated and sulphate of copper in solution, at ordinary temperature, in order to determine whether silicate of copper would result. Aplite breaks up into small particles by the process of erosion, the same as the granite does; therefore that gets back to the proposition that you must have an absolutely cold condition at the surface of the ground to bring about a deposit of copper sulphate, and I do not think it can be accomplished through such agencies; and along with the heat were the gases, which are sometimes called vapors. They were also the agencies which brought about the breaking down of the silica; I certainly think the vapors would attack the silica, and that they would attack it to a greater extent than though the copper was contained in a solution of water, because you have your interlocking crystals that Mr. Winchell tells about. When the ascending waters are brought up from deep-seated places, certainly the silica that was near the surface was changed, from his own testimony. The ascending waters carry silica in solution,—I think there is some silica,—of course, I get that from the theory of geology. Granite contains feldspar; the feldspar is altered and becomes clay, *which* kaolin; some clays, particularly in the Butte veins, are found at great depth; I have found pieces of kaolin that would weigh ten pounds in the Mountain Con on the eight hundred foot level. [1302] It occurs at the surface as well as at depth, because all of our

(Testimony of Samuel Barker, Jr.)

porcelain is made from clay that is mined at the surface. Kaolinization may be due to descending waters or ascending waters. I do not know that the kaolinization of the feldspar renders the silica of the feldspar active, so that when it is brought in contact with the copper sulphate in solution, the result of the chemical reaction is silicate of copper; the theory you are proceeding on now is, because there has been a kaolinization of the granite out here, and a replacement of a portion of the granite by copper, that it comes from the surface,—descending solutions,—but kaolinization has taken place, as I should say, in the veins of the Butte camp, not from descending waters at all; but from ascending waters, because I find the kaolinization at such a great depth, into the sulphide zone, that certainly descending solutions would not have been responsible for the kaolinization of the feldspar. The granite away from the veins in the Butte camp is absolutely solid, as far as I have seen; I have not seen any kaolinization on the surface; I have seen the granite boulders in the immense district north of here, with its great area of rounded boulders, showing a great deal of erosion. Certainly it does not show to me any kaolinization of the feldspar; I would not say that there is not any kaolinization except in the vicinity of the veins, because there might be other agencies which would bring about kaolinization, excepting where you have vein fissures. The clay beds are the result of kaolinization. I did not say that clay, wherever it occurs, is the result of kaolinization of the feldspar in the granite, because

(Testimony of Samuel Barker, Jr.)

you find clay beds absolutely remote from granite areas, thousands of miles, in some instances; for instance, [1303] the greatest clay-beds in England are not anywheres near any granite area,—and the purest clay-beds, too, in the world. The clay-beds in the granite areas are due to the kaolinization of the feldspar in the granite,—some of it. I think I said a few minutes ago that by both agencies there could be a change; I said I found it deep in the Butte camp, which must have come through ascending solutions; and you can find it close to the surface, which probably was occasioned by descending solutions, although in this chrysocolla which we have out in the district we are speaking of, I think came about from ascending solutions in the first place. If the granite or the feldspar of the granite in the district we have under discussion now should be kaolinized, there is absolutely no reason why this coloring matter which is copper, as you call it, should not have spread over the entire mass. Why should there be any lines of demarcation there at all, when we have the same conditions for breaking down and kaolinizing the same piece of granite, and one foot from it you do not have it at all? That is absurd. I don't know whether the result of this is to produce silicic acid; I see no reason why, because the feldspar is not a silicate at all. The silicic acid would certainly come from the silica of the rocks. There might be a little silica in the feldspar of the granite; I don't know the chemical composition. Have you got a geologic folio here?

(Testimony of Samuel Barker, Jr.)

By the EXAMINER.—No, none was introduced in this case.

The WITNESS.—If it does contain silica, then silicic acid might result from the kaolinization of the feldspar, and if this silicic acid and sulphate of copper are in contact, you might have silicate of copper as the result of the reaction,—now let's get right back to the ground in controversy. Now, [1304] you have the opportunity for this same breaking down in every particle of granite over that whole area, without question and yet you only find the copper extending out for a certain distance from what were originally the main fissures. If, with the indiscriminate breaking down which you say takes place out there, and with the copper sulphate caused by erosion, and the kaolinization of the feldspars in your granite, certainly the whole area should have been kaolinized with chrysocolla. And the facts do not bear that proposition out at all. There is absolutely no reason, under the conditions you are laying down for me here, why the whole area should not have been colored with copper, and it is not, and that could not possibly result from the fact that there was more chalcopyrite in one portion of the granite than there was in an adjoining portion; that is a proposition that nobody can settle. Chrysocolla is not evenly distributed through the granite, but it is not so scattered in this one spot so as to bring about the conditions that you are trying to bring.

Q. If the chalcopyrite becomes oxidized and changed to sulphate of copper and is dissolved by the

(Testimony of Samuel Barker, Jr.)

descending waters, it will be carried along channels, will it not, that is, through the breaks in the granite to a greater extent than it will permeate the mass of the granite by capillary attraction.

By General NOLAN.—We will object to that for the reason that the question is based upon confessedly wrong assumptions. The witness is asked about the deposition of this chrysocolla through capillary attraction when, as a matter of fact, the question assumes that the staining is done by descending waters. Consequently capillary attraction could have no application at all.

By Mr. SHELTON.—I think the witness will be able to answer [1305] without argument of counsel.

By General NOLAN.—If the capillary attraction cuts any figure in this problem now under discussion, it is because of ascending rather than descending waters, and waters ascending beyond their levels.

A. If the fissures or the cracks in the granite are open, why, certainly, it would afford the means for a more ready circulation of waters than the solid granite mass itself.

The WITNESS.—The water would not permeate the solid mass of the granite to the extent, certainly, that,—if the fissures were opened, why, that would be the ready means,—there would be no use,—it could not spread out at all then. It would not spread out. It would penetrate the mass to some extent, but not to the same extent that it would be carried through the open channels. You will not find the copper or

(Testimony of Samuel Barker, Jr.)

any other mineral permeating the granite mass when it has been occasioned by descending waters, because the granite mass originally is so,—it is not porous. It is practically a solid block,—that, unless you had the agencies that come through ascending solutions, the copper or any other mineralization, would not be forced into what you call porous granite, because the granite is not porous; it is practically a solid monolith; if a chunk of granite is immersed in a vessel of water it absorbs the water, like a piece of steel would,—a piece of steel would take on water if placed in water; I venture to say, though, that a piece of granite such as existed there originally and not like the material that you are showing me now in this sample, would not be increased in weight but a very infinitesimal part, because of its immersion in water. When the copper is in solution in water, the copper is carried wherever the water [1306] goes, and if the chunk of granite absorbs moisture, it will also absorb the copper with it, and there would be a greater deposit of copper in cracks in the granite, and open fissures of that kind, than in the solid granite. I do not think I would expect to find a greater deposit of copper in the vicinity of the cracks and fault fissures than in other places, which would account for the uneven distribution of the copper in the granite, because you are assuming now the character of material as the granite that you have shown me, being a portion of exhibit 35. I say that the granite originally out there must have been, and was the gray granite mass, such as you find removed from the

(Testimony of Samuel Barker, Jr.)

veins here in the Butte camp, when pierced by long cross-cuts, that it was unaltered and a solid mass. At the present time, the surface of the granite there is more or less broken up, and there are numerous cracks and fissures throughout the surface, and there are portions of the granite there where the disintegration and breaking up of the surface and the occurrence of cracks is greater than in other places, and I would expect to find the greater deposit of copper in those places where there is greater disintegration of the granite and more cracks, assuming that it is due to ascending solutions; that would be the case, and yet the ground itself disproves that statement. For instance, in the Rabbit tunnel,—tunnel No. 31,—you have at the beginning of the north cross-cut, so called, running off from the tunnel, a fault, or a vein, whatever you want to call it there,—I don't know what the witnesses have called it,—and yet you do not find any of the green staining there at all, absolutely none, and yet that certainly, being alongside of the vein which is found in the vicinity,—which is found in the north cross-cut,—which have [1307] afforded a ready means for those circulating copper solutions, and yet you do not find any green staining there. I find it in some of the other fissures in that tunnel; right in that there tunnel, for instance, east of the second fault plane, you do not find any green staining at all, and yet within the limits of the two fault planes, it is very green indeed. I do not find a green staining of the granite there which is not connected with any crack. In the

(Testimony of Samuel Barker, Jr.)

cross-cut north from tunnel 31 some distance, I found a green stain just before you get to the vein,—I should say not more than two or three feet from the vein; now, my other testimony went into that thoroughly, because that was one point that I paid particular attention to when I was on the ground. The staining is so terribly slight there that it can hardly be called a green staining, and yet I admit I found specks,—it is chrysocolla. I found this green staining in the north and south faults; in tunnel 31 I found it. The Continental fault certainly has been mined and shipped, and it was commercial copper ore; there are places in it where there is not any chrysocolla at all; I have seen the Continental fault as far north as the Butte & Bacon ground, and I did not see any chrysocolla there in that fault. I do not recall now any places near and in the vicinity of the ground in controversy where there are places with no green staining. In the same vein, within ten feet of each other,—two points within ten feet of each other,—you would find a more ready circulation of waters in the one point than you would in the other,—and if the deposit is due to descending waters, it might be accounted for on account of there being a freer circulation of waters in one place than in the other; you have in your massive granite fissure out there on the Butte [1308] & Boston placer,—why, certainly, the granite itself that is now mineralized, was the same, as far as the ready passage of circulating mineralized waters was concerned, in one place as in another, and yet you do not find the whole gran-

(Testimony of Samuel Barker, Jr.)

ite mass mineralized. I am speaking of what I find to-day. There is the Mullins vein fissure, so called, it has higher mineralization now than you will find on either side of it, and you will find places in the Mullins vein itself that are very much higher in copper contents than a point five or six feet away from it in the very same fissure. Those are things that geologists or no one else knows how to account for. Why we should have chutes of ore in a vein is something that is peculiar, why they should dip one way or another, and why they should be higher in values at one spot than in another, when, to say to-day the same ready means is afforded to circulating waters, is beyond us. If the formation of chrysocolla being due to ascending waters, I would not expect to find it at depth; below your permanent water level, why, there has been certain acids or alkalines,—whatever they might be,—that have changed the material that was not affected by that permanent water level. The material that is above the permanent water level, we find in practically every vein, the oxidized zone and the sulphide zone, and the changes came about because of what is known as the permanent water level, that is, there are, as I said, acids and alkalis contained in those waters which have changed the rock itself, or changed the mineral in the rocks or veins, and they are termed sulphides. I would not expect to find it below the permanent water level; I would expect to find sulphides, and the reason I would not expect to find it below the permanent water level is due to the presence of acids and alkalis below

(Testimony of Samuel Barker, Jr.)

[1309] the permanent water level because they are not found above it; I know these acids must have been there because the fact that I see in the ground proves it to me; I don't know what the waters contained; I do not think the waters to-day are the same that were there originally. It does not seem from the conditions we have here that the chrysocolla that is to be found to-day in the Mullins fissure below the permanent water level is as it existed probably when the fissure was formed and the original mineralization took place; the immense Silver Bow Basin below here, which has been filled up several hundred feet, this rock out here stood probably a thousand feet above that and probably more than that, because it is claimed that six hundred feet of erosion has taken place. And we find to-day that the present surface of the ground of the Butte & Boston placer must be practically a thousand feet above the original solid ground of the Silver Bow Basin. Now, I should think from that that this material has always been above the permanent water level. I am more or less familiar with the Bullwhacker. I do not know where the permanent water level depth is there; I think that if you would run a tape-line down the shaft now you would find it, but I don't know what it is. If I were to sink in the rock out there where there is an occurrence of chrysocolla, and found that it disappeared as I went down, and before I reached the permanent water level, it might be the case that it was due to descending solutions rather than to ascending solutions, and yet no one knows what the

(Testimony of Samuel Barker, Jr.)

conditions were existing in that ground that otherwise might make a change too. As I remember it, in the Bullwhacker, you find the chrysocolla extending right down to what might be termed the permanent water level; at that place you find the material very runny, [1310] indeed. The granite, or what was the chrysocolla above, is very soft material now. That water level is raising up and down all the time. It is not stationary. And that has probably occasioned some changes in the vein matter itself. For instance, in any vein where you have rich, oxidized material near the surface and extending down for some little distance between that rich,—the bottom of the rich portion in the oxidized zone and what we call the permanent water level, you find a zone that is practically leached out, no minerals there at all, and yet, when you get down below the permanent water level you find the rich mineralization again, but it is in the form of a sulphide. There has been some agency there that has changed the chrysocolla, probably to a sulphide, and has taken it down to a greater depth, taken the copper down in the form of a sulphide to a greater depth below the permanent water level. This is the history of all the Butte mines, any way, as far as their oxidized and sulphide zones are concerned. And it is true of practically every other mine where you have waters. Of course, that does not occur down in Arizona, where we have the oxides of copper and some of the other copper minerals,—the carbonates. Complainant's Exhibit 35 has undergone some alteration, and it has been replaced by cop-

(Testimony of Samuel Barker, Jr.)

per; there has been a mineralization by replacement. If I were to assume that that was very much greener when it was brought in here, and in drying it has become much lighter, that would not mean any lessening of the copper content at all. The original color of the chrysocolla would be brought back, that is all, to its former coloring. The dark spots in this granite (referring to Complainant's Exhibit 35), I think originally was the mica of the granite; some of the mica remains practically unchanged, [1311] and some of it is altered and changed. It is not the mica of the granite as it is there now, because anyone inspecting the rock would see that there are some of the mica plates there visible; they shine. By far the greater portion of the black material has been altered, and if that was the original mica, why, at least nine-tenths of the mica of that granite has been altered or partially altered; the quantity of mica in granite is a varying thing; I think it would be impossible to get two pieces of granite and find absolutely the same percentage of mica; if this had been mineralized by replacement, I do not think the mica would have entirely disappeared. I have seen in places, where there has been a mineralization by replacement, where the mica shows as in this sample 35; I can show you what you call absolutely fresh granite, and on shipping it it will return you a hundred dollars a ton. It is right over here on the Silver King. The miners threw it on the dump as waste, and afterwards hundreds and hundreds of tons were shipped to the smelter and returned one

(Testimony of Samuel Barker, Jr.)

hundred dollars a ton, and yet you cannot find any replacement in it, or you cannot by the eye. It is not a fact that the only alteration that has taken place in this granite has been due to the action of the air; the alteration in these rocks has been the alteration of the original feldspar and the original micas in there, and a replacement of the granite by copper,—or a replacement in the granite, I should say. Replacement means that some element is taken out and another added. In this granite, from the looks of the rock, without a chemical analysis, I should say the major portion of the replacement was in the feldspars of the granite, and a slight portion of the replacement came about by the change of the micas, of the alteration and replacement [1312] of the micas. I don't know what element was taken from the feldspar; I would not feel qualified to testify as to what element or what mineral had been replaced by the copper; what I know is the fact that I see before me in the rock that there has been a replacement, from a visual examination; I find in the rock that the feldspar have been somewhat altered, that the copper exists in the feldspar and slightly in the micas, and that it is not a coating, but that it is through the entire feldspar of the material, and partially in the mica. There is a slight change of color; this rock is a little greener than it was originally, and the green coloring extends throughout the mass of the rock, but it does not extend as a coating; it is through the mass,

(Testimony of William R. Hocking.)

and the green coloring is principally in the feldspar, of the rock.

(Signed by the witness before the Examiner, April 9, 1912.)

**[Testimony of William R. Hocking, for Defendants
(Recalled in Surrebuttal).]**

[1313] WILLIAM R. HOCKING, heretofore duly called and sworn as a witness on behalf of the defendants, being recalled, testified as follows:

Direct Examination.

(By General NOLAN.)

The WITNESS.—I am the same Mr. Hocking who testified in this case before as an assayer; I recently received some samples from Mr. Stevens for the purpose of having them assayed, and I did the assaying of the samples that were turned over to me by him myself, and furnished him a certificate showing the values of the samples that were assayed by me.

By General NOLAN.—Will you mark that for identification? (Handing paper to examiner.)

By the EXAMINER.—I will mark that Defendants' Exhibit No. 114.

The WITNESS.—The certificate marked Defendants' Exhibit No. 114 was issued by me of the assays brought in by Mr. Stevens, and the returns correctly represent the values of the samples turned over to me by Mr. Stevens.

By Mr. SHELTON.—Object to that. There is no way in which it appears that it is proper surrebuttal testimony.

Q. And I notice that you have number marks.

(Testimony of William R. Hocking.)

Did you give those numbers to the samples, or did the samples themselves have those numbers?

Mr. SHELTON.—Same objection.

A. The numbers were marked just the same as they are here when they were brought into the office.

(Signed by the witness before Examiner April 9, 1912.)

**[Testimony of Louis Mason, for Defendants
(Recalled in Surrebuttal).]**

[1314] LOUIS MASON, heretofore called and sworn as a witness on behalf of the defendants, being recalled, testified as follows:

Direct Examination.

(By General NOLAN.)

The WITNESS.—I have done additional work since the adjournment, upon the ground in controversy, in shaft 21 and in the Olivia discovery; I also accompanied Mr. Stevens when he obtained some samples for the purpose of having them assayed. Shaft No. 21 is the northerly shaft,—the deep shaft, so called, and it is about a hundred and ten or twelve feet deep.

Q. And what was the character of the work that you did in that shaft?

By Judge BOURQUIN.—Object to this character of testimony for the reason that it does not come within the rule of what is surrebuttal testimony, and hence incompetent.

A. I sunk the principal part of the shaft to a further depth of about eighteen inches. Then I drove a cross-cut south about two feet in height and a half

(Testimony of Louis Mason.)

in width, and about five and a half feet in height and to a distance of about twelve feet south from the south end of the shaft. And in the driving of this cross-cut the stratas or seams, sometimes called, ran in an easterly and westerly direction and dipped north, and at a distance, in the bottom level, going south, the cross-cut of about eight feet,—no, about seven feet from the shaft, I cut across a heavy strata or wall running east and west and dipping north. I drove across that at the top, and left a level plane, as it raised up, toward the south, and I cut [1315] each way in the bank a distance of about a foot, showing this wall as it runs in its course east and west, and as it dips to the north. I also channeled out in the sides of the cross-cut on other planes or stratas to show their dip and their strike, so that anyone could readily see that the strike of all of those stratas were easterly and westerly and their dip to the north.

Q. Well, now, was that all the work that you did in this shaft No. 21?

By Mr. SHELTON.—Same objection, same ground.

A. I also cut out channels in the shaft for a distance of six or eight inches and one about sixteen inches along the west side of this shaft, and on the east side of the shaft, to show that those planes or stratas running east and west crossed this shaft and that they dipped north. And I also followed the line of the strata down on the west side and across the north end. I cut out there two places a distance of

(Testimony of Louis Mason.)

probably ten inches back along the wall, across the shaft. This was dipping north, so that any person could readily see the strike of those stratas and the dip of them.

The WITNESS.—In running this cross-cut to the south until I encountered this wall, I was in lead matter.

Q. And could you tell whether this was the wall of the lead that you encountered in this cross-cut?

By Judge BOURQUIN.—The like objection as that heretofore made, and also that it is leading.

A. It is a true slip or wall within the vein, apparently. There is vein matter still south of this wall.

Q. And in the work that you did there, what do you say as to whether or not the disclosures made show that this was simply [1316] a fault running north and south or a lead running east and west?

By Judge BOURQUIN.—Like objection.

A. Every indication is that it is an east and west vein. I should say that you could take a man that has never visited a mine or a vein, and he could say readily that, by an examination of the cross-cut and the shaft, the way those stratas cross it, that the stratas indicated an east and west vein with a north dip.

The WITNESS.—Aside from this work in the deep shaft, I did other work on that northerly lead since the adjournment took place, in the Olivia discovery, which is located on the north vein and near the north side line of what is known as the Butte & Boston

(Testimony of Louis Mason.)

placer, or the Rabbit and Olivia quartz lode mining claims; it is situated between shafts No. 1 and 2, and a little north, as shown on the map, Defendants' Exhibit 1; the south side of this shaft, the Olivia, probably is in line with the north side of shaft 1 and 2, and it is so marked on the map.

Q. Now, what was the character of the work done there?

By Judge BOURQUIN.—Objected to, like the objection heretofore, that it is not rebuttal and hence incompetent.

A. I cleaned the debris out of the bottom,—out of the Olivia discovery, which had filled in the past years, and drove a drift from the bottom of the Olivia discovery west, and connected to the north side or corner of shaft No. 1.

The WITNESS.—The drift was approximately ten feet in length.

By Judge BOURQUIN.—Let the record show that the objection goes to all this line of testimony.

The WITNESS.—The drift was drove in country rock along the hanging-wall of the north vein, leaving the vein stand on the [1317] south side of the drift as it run west, and clear granite on the north side as you go west, and there is a lead discovered in that drift the entire distance, and it is continuous throughout the entire distance and to the west side of the shaft No. 1, where it is last seen. The hanging-wall of that lead was disclosed in the drift. I was with Mr. Stevens all the time in taking those samples, with the exception of three samples which

(Testimony of Louis Mason.)

he took while I went for more candles.

Cross-examination.

(By Judge BOURQUIN.)

The WITNESS.—I think the Olivia shaft was sunk in 1900; I started my drift in the Olivia discovery about eighteen inches or two feet north of the south end of the discovery shaft, and drove west from the west side of the shaft; I started in the country rock north of the vein; on the southern side of the drift is the vein; north in the Olivia discovery shaft it is granite, decomposed some; you will find little stratas, maybe an inch thick, of quartz in places in that granite, as you usually do in granite. I drove this drift in the country rock; I should say it is five feet high; it is all in country rock, and the back is in granite; it shows just the slight touch of the wash, just at the back of No. 1. My drift came a little below the timbers in the bottom of shaft No. 1; I should judge the drift was about seven feet from the bottom of shaft No. 1, and all the way along I exposed the hanging-wall, and I picked into the hanging-wall and took samples out of it, about three or four inches, so as to get samples; I did not pick through the vein to see how far south it went; the material on the [1318] south side of the wall was vein matter, iron and quartz; it resembled the material in shaft No. 1; it produced the same iron that I produced here before in evidence; I would say it was the same practically as the exhibits we brought here from shaft No. 1, and really a better grade than the exhibits we brought before. My drift cut the north-

(Testimony of Louis Mason.)

east corner of shaft No. 1; I made the drift about twenty inches or two feet wide, and the corner of the shaft came pretty close to the center of the drift; the most of it I think was on the north side of the corner. I left the hanging-wall standing as the southerly side of the drift all the way along there, picked into it, but did not penetrate it more than enough to take a sample or so. Some of the granite on the north side of that hanging-wall was iron stained, but not very much; it is decomposed to some extent; it is not a hard, firm class of granite; it is like the granite which is usually found near the surface; there is small planes in it, that you will find in all granite, and there is a little more coloring, probably, in those seams than there is between them; we did not use drills in blasting,—we picked it all the way.

I did no cross-cutting north in shaft No. 21. The entire distance of the cross-cut south was in bedrock, with the exception of the back. I should judge there was something like four feet of the cross-cut in bedrock,—that is, from the floor of the cross-cut up; I inclined the cross-cut as I went south, and I crossed various planes running east and west in the driving of this cross-cut, heavily iron stained and smooth, dipping to the north, and about eight feet out, I should judge,—seven or eight feet, I came in contact with a larger plane than the others,—the seam was thicker, understand, and well defined, [1319] running northeast and west and dipping north. I cut some beyond it, and it is still vein mat-

(Testimony of Louis Mason.)

ter beyond that wall. It is quartz heavily iron stained, and you find some of this black iron, that some prospectors call hematite iron, in the rocks. The material I cut through in my cross-cut is of a character more inviting than that in the shaft,—it shows stronger in mineral, in iron. I did not bring in any as an exhibit; I brought some to the house with me, but I forgot it as I came away. About seven feet from the shaft in my southerly cross-cut I crossed a heavier seam or wall, and as far as you can see it it extends clear across the cross-cut and pass out on each side. A wall usually is expected to continue farther and more regular than an ordinary seam; a wall and seam are not the same; a wall might extend farther than a seam; that is the only difference I know. This wall was about half an inch thick, and the matter composing it is iron material; on the north side of it was vein matter and quartz and porphyry and some talc,—it is there in the shape of a ledge, as you usually find in ledges. The cross-cut is about two feet and a half wide; there is more or less quartz in the shaft, in this vein matter, and also in the cross-cut going from the shaft to this wall; you find the quartz continuous all through this,—quartz within the ledge; it is solid quartz; it is quartz in various pieces within the vein matter, as you usually find in the veins at the surface, and you will find pieces of porphyry within the vein matter, in the shaft and in the cross-cut. I passed through the seam or wall that I found about seven feet from the shaft, and on the south side of that found vein

(Testimony of Louis Mason.)

matter, and again this broken-up quartz and porphyry and vein matter mixed up; I took a piece of quartz, a highly stained iron material that Mr. Kemper picked up [1320] out of the bottom of this cross-cut south of this wall. At present I would not call that wall or seam seven feet from the shaft there either the hanging-wall or the footwall of my vein. Where this wall south of the shaft appears heavy iron stained, I channeled out, or cut out, on the east side of the cross-cut a distance of about a foot, and about three and a half feet, probably, up on the incline or the raise of the wall. I cut out on the west side of the cross-cut also. Then farther toward the shaft I cut out a channel in the east side of the cross-cut, again showing one of those seams or planes, as it had its course easterly and its dip,—to show its dip northerly,—and in the shaft I think I channeled out five or six places there to a depth from three inches to twelve,—fifteen inches,—showing the strike of those seams and the dip of them, both on the west side of the shaft and on the east side of the shaft, and upon the north side, showing their dip on northerly; I cut into the sides of the shaft and the cross-cut along the strike of these seams or walls, as I term them, following them, so as to show readily their strike and dip. I sunk the shaft about eighteen inches deeper, I should judge. I think it was about five feet in bedrock then; in going south in my workings, I had the back in the wash all the way. I judged this channeling was necessary to show the seams or walls, because they had various men exam-

(Testimony of Louis Mason.)

ine that shaft. These lines were very plain and easily seen in the west side of the shaft, in the north end and in the east side. They gave testimony that the vein was a north and south vein, and I cut those channels out of the sides of the shaft and the end of the shaft to show the strike of those seams or planes, and to show the dip of them. They already appeared in the sides of the cross-cut, [1321] and in the sides of the shaft, but it seemed that the geologists did not recognize them as being northeast and west strike and a north dip; as far as I picked in, every place those planes continued on either east or west, according to which side of the shaft I was on. Before they were cut, you could see the brought lines running down the side of the shaft, and by channeling down you could see the level plane as far as I channeled. I dug the rock off of the upper side of some of them, and some of them I dug it off the under side, leaving the plane smooth, so it could be easily seen; I used a pick. I saw no seams or planes running northerly and southerly in that shaft, with the exception of the one Mr. Shelton examined with the pick in the northeast corner. There is a boulder of granite, apparently lying in the corner of the shaft. The shaft cuts a "V" right out of that as it goes down, and it shows a seam of a white substance around that rock, but that does not in any feature indicate a north and south vein; it is in bedrock at that point; there is not a northerly and southerly plane appearing on the southerly or westerly side or corner of that shaft,—I do not see anything there;

(Testimony of Louis Mason.)

I channeled out on the north side as well as on the south side and showed those walls running east and west. Mr. Shelton and Mr. Kemper examined that and took the pick and picked into the one near this granite boulder that I cut out.

Redirect Examination.

(By General NOLAN.)

The WITNESS.—The dip of the lead I encountered from the [1322] Olivia discovery to the No. 1 shaft is very near vertical; it has a slight dip to the north.

(Signed by the witness before the examiner, April 9, 1912.)

**[Testimony of Samuel Barker, Jr., for Defendants
(Recalled in Surrebuttal).]**

[1323] SAMUEL BARKER, Jr., heretofore called and sworn as a witness on behalf of the defendants, being recalled, testified as follows, to wit:

Direct Examination.

(By General NOLAN.)

By General NOLAN.—Will you mark that map (handing map to the examiner)?

By the EXAMINER.—I will mark this map Defendants' Exhibit No. 115.

By General NOLAN.—And mark this one, please (handing map to the examiner).

By the EXAMINER.—I will mark this one Defendants' Exhibit No. 116.

Q. Mr. Barker, I will call your attention to Defendants' Exhibit 115, marked so for identification,

(Testimony of Samuel Baker, Jr.)

and especially to the portion of the same that represents the ground in controversy. What do you say as to whether that is correctly on the map that we are talking about?

By Mr. SHELTON.—Of course, it is understood that our objection to the testimony, on the ground that it is not proper surrebuttal testimony, is considered as going in as to all this line of testimony, without the necessity of repeating it as to each question.

By General NOLAN.—Yes, sir.

A. The portion of the Defendants' Exhibit 115 east of the colored line, is a correct representation of the various openings, lines and workings, on a scale of two hundred feet on the ground as one inch on the map.

[1324] The WITNESS.—It correctly represents the east line of what is known as Mineral Application No. 888,—the Pittsmont mine; I furnished the eastern portion of the map to Mr. Williams, who made the rest of it, and the line that I just spoke of was also placed on the map as a base that Mr. Williams might work from, he having made a survey of that line.

Cross-examination.

(By Mr. SHELTON.)

The WITNESS.—All I know about this map is that it is a correct representation of the workings upon the ground east of the east end line of Application 888.

(Signed by the witness before the examiner April 9, 1912.)

[**Testimony of Daniel Williams, for Defendants
(Recalled in Surrebuttal).**]

[1325] DANIEL WILLIAMS, heretofore called and sworn as a witness on behalf of the defendants, being recalled, testified as follows:

Direct Examination.

(By General NOLAN.)

The WITNESS.—I made this portion of the map marked Defendants' Exhibit No. 115 (indicating), representing the Pittsmont ground, Application No. 888; the Pittsmont ground abuts the ground in controversy on the west,—that is, the east end line of the Pittsmont coincides with the west end line of the ground in controversy.

Q. I notice that you have some red lines on the Pittsmont ground. What do these lines represent?

By Mr. SHELTON.—That is objected to as not proper surrebuttal testimony.

A. They represent the Donner vein. The full line represents the Donner vein as opened up by drifts, that is to say, the twelve hundred foot level, that much of it opened up by drifts. And the dotted lines are projections.

Q. And the eastern portion of the red lines. I understand that you have two, four, five of them, with figures adjacent to them. Is that true?

A. Yes sir.

By Mr. SHELTON.—Same objection, same ground.

Q. And what did you intend to show by those lines thus existing,—with the figures existing?

(Testimony of Daniel Williams.)

By Mr. SHELTON.—Same objection, same ground.

A. Those represent the vein as opened up in those various levels by drifts.

[1326] Q. And in their course, did you intend to correctly represent the strike of the lead?

By Mr. SHELTON.—Same objection, same ground.

A. They are correctly represented.

Q. That is to say, in the case of the twelve hundred, you have the lead in its strike represented to the point where the line ends on its course to the east?

By Mr. SHELTON.—Same objection, same ground, and the further objection that it is leading.

A. Yes, those represent the vein as opened up on the twelve hundred level.

Q. I notice that in the case of the one thousand, and in the case of the eight hundred, you have dotted lines terminating the lines. Is that true?

By Mr. SHELTON.—Same objection, same ground.

A. Yes, sir.

By General NOLAN.—I am perfectly willing that every question I put him on this question shall be deemed objected to.

The WITNESS.—In the case of the lead on the one thousand level and on the eight hundred level, the easterly portion of the red lines is represented by dots or dashes, which represents the vein projected,

(Testimony of Daniel Williams.)

from the best information that we have at hand. In the case of the twelve hundred level and the thousand level and eight hundred level, and the six hundred level, the figures 70, 74, 85 and 90 represent the dip of the vein at those points; the Donner lead at the six hundred and sixty foot level has a dip of ninety degrees, or, in other words, it is vertical. I prepared a map showing a cross-section of the vein, which would show the dip of this lead; it is Defendants' Exhibit 116, and I have two red lines on that map; [1327] the line to your left represents the cross-section on the vertical plane at the western portion of the mine, as shown on Exhibit No. 115; the right-hand one represents a cross-section of the same vein looking east at a point at the extreme eastern point of the mine,—the line B-B; on the vertical plane A-A the dip shows,—that is, this one over here (indicating),—it shows at the twelve hundred, eight, seven and six, or six hundred feet of the vein, whereas, on the B-B it shows twelve, ten, eight and six hundred and sixty. Taking the lead in the eastern portion of the ground,—the most easterly portion of the ground, where the lead is exposed from the eight hundred to the six hundred and sixty foot levels, the dip of the lead through that distance would be probably about eighty-three degrees, and as you stope up on the vein it becomes straighter. In other words, it approaches the vertical as we went upward on the vein.

By General NOLAN.—We will offer these maps in evidence.

(Testimony of Daniel Williams.)

By the EXAMINER.—They will be received in evidence.

Cross-examination.

(By Mr. SHELTON.)

The WITNESS.—In projecting the vein easterly, where I have the dotted lines at the twelve and ten hundred foot levels,—on the twelve we have opened up a great deal farther east than we had on the ten hundred and eight hundred, and with those strikes it is no more than natural to dot that as showing that the vein would be that position at those various levels; and we have the ten hundred and the ten and eight, but not where it is dotted. You will notice throughout the map almost the [1328] parallelism that exists in that vein. It is no more than natural that we would expect that to continue on east; so far as the veins go I would consider that an excellent example of parallelism; at the eastern extremity of the map the lines are considerably farther apart than on the western, but you are considering a distance of over a thousand feet, whereas, I am only considering a couple of hundred feet; that is what we have for the veins to go by; as you go east those come together. I think the six hundred and sixty foot level on the Donner vein is about nine hundred feet lower than the elevation of tunnel No. 31,—about nine hundred feet difference in elevation; tunnel 31 would be about that much higher. The strike of the vein eastwardly of the point “70” is about seventy-two degrees north of east; it shows on the twelve hundred,—the vein again turns to the south; in fact that exhibit shows;

(Testimony of Daniel Williams.)

there is nothing to indicate how far south it goes or what its strike would be, except its behavior in the past through three thousand feet,—has been practically east and west. As to the behavior of the vein east of the line marked “Vertical Plane,” at that point east it has a northeast and southwest course, but you notice in through here (indicating) it has a northwest and southeast course; the vein is sinuous, and of course it varies from place to place; its variation in the east and west course is much greater east of that line for the distance that it is uncovered than it is west of that line, in some respects, and I could prophesy what the strike of the vein would be beyond the point where it is uncovered from its past behavior. Take it right here at the extreme western portion, you will notice its position north is practically the same; the general trend is east and west; it will vary somewhat between those limits; [1329] the extent of its variation on its course is an indeterminate matter to an absolute degree; the vein, as it was originally formed, extended above the point “90” for about nine hundred feet probably,—it eroded away; at the six hundred and sixty foot level the vein is practically vertical; I would expect it to dip to the north, as its general trend has been so general in that direction. I never would expect it to dip to the south; it might possibly have a very much more decided dip to the north above that point than it had at the six hundred and sixty foot level.

(Testimony of Daniel Williams.)

Redirect Examination.

(By General NOLAN.)

The WITNESS.—In my judgment, I would certainly think the vein would continue on.

Recross-examination.

(By Mr. SHELTON.)

The WITNESS.—It would continue practically vertical; I think that because we have to judge the future sometimes by the past, and I certainly would not try to pick out something that was more difficult than the things already shown. As you go up on the vein it becomes more vertical,—more nearly vertical,—and you certainly have to consider that. It is possible that it could happen that that could be a straightening of the vein through that portion of the dip only, and that above the six hundred and sixty foot level it would return to its normal dip; but I do not think it is the case at all. Between the [1330] six hundred and sixty and eight hundred it shows very nearly vertical; from the thirteen hundred to the six hundred and sixty the average dip is seventy-two degrees; if my development only extended upward to the eight hundred foot level, I might possibly have taken an entirely different dip for the vein in projecting it upward; we are a little clearer as to the dip of the vein above the six hundred and sixty foot level, because we have four hundred and forty feet of the vein exposed; therefore, we use that as a sort of a leading light. There are no veins besides the Donner vein there having an easterly and westerly course.

(Testimony of Daniel Williams.)

Q. In speaking of veins,—are there any fissures there having an easterly and westerly course, excepting the Donner vein?

By General NOLAN.—That is objected to as not proper cross-examination.

A. Why, not what I would term a fissure; no.

The WITNESS.—That have a width of an inch, couple of inches; we are not familiar with the ground to the south; farther north there are east and west veins, but I am not familiar with the part to the south.

Redirect Examination.

(By General NOLAN.)

The WITNESS.—Adopting the lamp of experience, if, as a matter of fact, the work was prosecuted on the lead towards the surface to the point where my pencil is (indicating on map), and excluding this one hundred and forty feet, if I were then asked what, in my judgment, was the dip of the lead extending towards the surface, I would certainly say that it [1331] was as indicated by the portion exposed; and the four hundred and forty feet being exposed, and coming towards the surface with the dip established, or with the fact established that there is no dip at all, in the light of the disclosure, as to whether or not, extending towards the surface, I would say that it would preserve the same dip. Observing the strike of the lead at the twelve hundred foot level, and especially that portion of same east of what is designated the “Vertical Plane,” in the light of the exposure of the lead west of there, I would not say

(Testimony of Daniel Williams.)

that the strike of the lead would be as indicated by your pencil, following the course as it is disclosed immediately east of the vertical line,—I think the vein would continue on practically east and west. If the lead were only exposed to this point where we have this depression here (indicating on map), and without any disclosure made east of that point, the lead there, as it was projected, would have a strike southeast and northwest; the entire lead as disclosed has not that kind of a strike, so that, having in mind this particular piece of it east of the vertical line to which my attention was invited by Mr. Shelton, it would not be a fair basis for estimating the course of the lead by simply confining my observation to that particular piece, without considering the lead upon its entire strike as disclosed.

(Signed by witness before examiner, April 9, 1912.)

[Testimony of I. H. White, for Defendants (in Surrebuttal).]

[1332] I. H. WHITE, duly called and sworn as a witness on behalf of the defendants, testified as follows:

Direct Examination.

(By General NOLAN.)

The WITNESS.—My name is I. H. White; at the present time I reside at Blackfoot, Idaho, Bingham County; I am a miner, and have followed that for thirty-two years,—quartz mining. I mined in Silver Bow County; I was a resident of this city for fourteen years, and worked in numerous mines here,

(Testimony of I. H. White.)

as an underground miner, practical miner; I have also worked as a miner in Wyoming, Idaho, California, British Columbia, Alaska, as a practical miner; during that time I have held a position from working the the sump to general manager. I was at the Observatory Inlet, in Alaska; I was at Goose Bay, Observatory Inlet, for two years and ten months, and during the time I was there I was resident manager of the Hidden Creek Copper Company. I have met Mr. Winchell; he made a report on that property at Hidden Creek at one time. I tested that property for one hundred and fifteen feet below sea level, which was about a thousand feet in depth; the assay values are better at a thousand feet in depth than they were on the surface. If Mr. Winchell made a report that that property really had no value as a mine,—that there was simply this deposit on the surface, with no depth at all, I should certainly say that it has not been sustained at all in any way whatsoever, because the actual development work proves that it was the contrary. He made a written report.

[1333] I saw the report that he made; that is a copy of the report Mr. Winchell made that you hand me, on the Hidden Creek property that I had charge of the development work for two years and ten months.

By General NOLAN.—Mark that (handing report to the examiner).

By the EXAMINER.—I will mark this Defendants' Exhibit No. 117.

The WITNESS.—It is a correct typewritten copy

(Testimony of I. H. White.)

of the report made to Mr. M. K. Rodgers of Seattle; the original of it is in Room 707 American Bank Building, Seattle, Seventh Avenue.

By General NOLAN.—We will offer this in evidence, Defendants' Exhibit 117.

By Mr. SHELTON.—We object to the offer of the copy, without some evidence to show that the original is not obtainable after proper effort to obtain it, for the reason that it is not the best evidence.

The WITNESS.—I went over on this ground in controversy this morning; Mr. Bowman went with me, and I went into the deep shaft, No. 21 shaft it is, and I made an examination of the ground in the shaft and also in the cross-cut running to the south. I would consider that there was the measures of a vein, vein matter, disclosed in that cross-cut and in that shaft; I would consider it in a northeasterly and a southwesterly direction, from my observation there; I had no time to take any points or anything of that kind; it was simply from observation. The dip has a northerly direction. I also went into shaft No. 1; there are three holes there right close together.

By Mr. SHELTON.—This, of course, all goes in subject to the general objection that it is not surrebuttal testimony?

By General NOLAN.—Yes.

The WITNESS.—I also went into the Olivia Discovery shaft. [1334] I would consider that there was a wall there in those shafts, and vein matter, that would be indications that any practical miner would work on, and the course of that lead was following

(Testimony of I. H. White.)

an easterly direction,—easterly and westerly, and it had a northerly dip.

Cross-examination.

(By Mr. SHELTON.)

The WITNESS.—I live at Blackfoot, Idaho, and have had a residence there for two years; at the present time I have not any real occupation; I have retired; I had interests in that section of the country before I took up my residence there; I came down from northern British Columbia and southern Alaska two years ago in October and bought a residence there, and I have made that my home since, but I have not resided there all the time since; I was in southern Alaska last summer most of the time, but my family lived there; that is my postoffice address. The report of Mr. Winchell I referred to was made to Mr. M. K. Rodgers, in the interests of the Daly estate; there were two reports there; one is made on the Hidden Creek property and one on the Mineral Belt, some on the one on the Observatory Inlet, on the Goose Bay, and near the international boundary line between British Columbia and Alaska. I took a bond on that property in 1907 with other parties, and worked about a year on it, and turned it over to Mr. Rodgers and Mr. Hodgins; the bond and lease I had run for two years, and I worked under it for twelve months; at that time I took up the option and turned it over,—paid the option price of forty-eight thousand dollars; I had a lease on the Hidden Creek, eight claims; there [1335] was the Rudge,—I cannot remember the names of all of them; that is the

(Testimony of I. H. White.)

principal claim that the showing was on; I have a map of those that I could familiarize myself with very shortly. I obtained a lease on them in August, 1906, and done the work in 1907; when I obtained my lease on that, there was probably one hundred and fifty feet of development work done on the property at that time, in tunnels, all told. When Mr. Winchell made his examination there was about one hundred and fifty feet, about the same thing as when we took it up; they worked a short time after Mr. Winchell made his report; Mr. Winchell's report was on the same claims upon which I had a lease; at the present time the Gramby Copper Company of British Columbia have charge of the property; Mr. Hodgens sold his interest in the property; the property is being worked now; a smelter is being put up on it at the present time; they are building a smelter, making preparations for it; they are not taking anything out; they are developing ore at the present time; they are employing sixty men at the present time. Mr. McDonald and Mr. O. B. Smith and Mr. G. Roy Williams are interested in the Gramby Company. I done about four thousand feet of open cut work. I drove what was known as the Concentrate Tunnel, and I drove the main working tunnel seven hundred and eighty feet under that hill, tapping it at depth of four hundred and eighty feet in depth; the greatest depth obtained by me was a thousand feet, by diamond drill work. The diamond drill work is from the four hundred and eighty foot main working tunnel. I went there and stayed two months with the

(Testimony of I. H. White.)

Gramby people after they took the option on the property. This work was done, going down a thousand feet while I was there. The Bonanza and the Hidden Creek are about one and a half miles apart, on Goose Bay; there has been [1336] nothing done on the Bonanza property since Mr. Winchell made his report. I could not say anything to the contrary about Mr. Winchell's report on the Bonanza property, because there has been nothing done since. There is a report in regard to the Hidden Creek property and the other is in regard to the Bonanza property. Mr. Winchell's testimony here in court related to the Bonanza property, most of it, or under conditions that he found at that section of the country, but I notice that he winds up and takes in everything from the Alaska boundary to the Canadian line. I did not make any effort to obtain the original of those reports, to produce them here; I asked for the original and they gave it to me, and I had a copy stricken off, but for use here I have made no effort to obtain the original. I run a gold property in Alaska for a year or so. In Butte I worked in the Rarus, I worked in the Blue Jay, I worked in the Snohomish, I worked out west in a good many of these silver mines, I worked in the Germania, I worked in the old Blue Bird, I worked in the two Goldsmiths; in fact, I had so many jobs in Butte in fourteen years that I cannot remember them; I was shift boss a number of times; I was shift boss of the Blue Bird and of the Germania. In the bottom of shaft 21, the material was some granite, some quartz,

(Testimony of I. H. White.)

some little porphyry, mixed, I would consider it, yellowish, some yellowish, some brown, iron stained, some showed considerable iron; there was some there that I would consider talc, vein matter talc; it was all of a yellowish color; it would not be considered picking ground; it would depend on how you was working whether it would be considered picking ground or not; if you were sinking on it, it would not; if you were stoping probably it would. I saw no indications there of the use of [1337] powder or drill; the property was not working; I would not expect to find it there; I did not pick in it; I did not examine it to see whether there were small particles with a rounded surface,—I did not have the time; if I found such particles, as a practical miner I would consider it faulting, drag ore; that would indicate movement. At the bottom of the shaft the length of the greatest development is probably twenty feet, considering that this little drift they run in there was running in a southerly direction. I would not say positively it was, because there was no compass along. In the face of the north side there was the same material that there was in the bottom of the shaft. I did not notice any wall,—not what I would take as a permanent wall. Of course, my examination of that was just in a few moments, and really I am not qualified to make any statement in regard to that; I would not undertake to tell you whether it was a vein or a fault,—it could be either; really I would want to do more development work at that point; it is very near the surface of the bedrock there; I would consider

(Testimony of I. H. White.)

that the wash was within five or six feet; there are generally deposits along the surface; there is always an alteration by minerals; there is some stain generally, but generally the mica determines that, the amount of mica in the granite; if I found mica in the granite I would consider it country rock. I looked at the northeast corner of that shaft at the bottom, and there is granite mixed with it, bunches, but I would not say whether that disappears along the north side of that shaft as you go toward the west, because I did not have the time to put into it to make a study; I was just simply out there between two cars. I would say that farther east I looked the thing over, and I considered from the showings I [1338] saw there that any practical miner would be willing to go to work there on any reasonable terms; that is at the Olivia discovery; I am not referring to 21; in fact, I did not stop long enough at 21; I do not suppose I stayed there quite two minutes. There is some difference in opinion in regards to aplite dykes between the geologist and practical miner; what geologists call aplite dykes and a great many practical miners,—would call quartz or quartzite, or a mixture,—that and other formations; as a rule what is generally termed aplite by those people, it is generally pretty good indications to follow, I consider, in this district. I never as a practical miner tried to sink on an aplite dyke and develop it; I do not know that aplite is called one form of country rock; I am not a geologist; if I find the ore I work on it. In the Olivia discovery I found some

(Testimony of I. H. White.)

pretty good looking ore, something in the shape of copper, malachite, green stained, in the Olivia discovery, and following along the vein in the Olivia discovery; the vein itself would be considered an altered granite, with some iron stains in it. I found iron stains in shaft No. 1, but I do not recollect seeing any green stains in that one; I found the green stains in the Olivia discovery around the sides and the walls,—what is considered the walls there,—the walls of the vein. I did not see any country rock at that point, what I consider country rock. It was what I considered altered rock. As a matter of fact, the depth there,—in fact, it all shows to be altered, too, to a more or less extent, at that point. I passed through the cross-cut between the Olivia discovery and shaft No. 1, but in going through the cross-cut, I did not enter it from the 'Olivia, but from shaft No. 1. [1339] I could not say where I encountered the green stained rock in going through the cross-cut; my examination was so hurriedly made that I really ought not to give anything on that at all, because these other witnesses here are more acquainted with this thing than what I am, and you know yourself that to go down there for two or three minutes to go through that and see the ore there,—two or three feet,—that would look good to a practical miner. Shaft No. 1 showed mineralization on the selvage. You cannot tell whether that is a wall until you get into that; I would not say that was a wall or was not a wall, simply the measures of the granite there, mineralized to a certain extent with iron; the meas-

(Testimony of I. H. White.)

ures run east and west with a dip to the north; the material shows a little more quartz, little more iron along next to the measures than it does farther out, runs in seams; some of the wall of the shaft was in altered granite, mineralized with iron, some little copper in it; I call that vein material, and the south wall of the shaft was the same, and there is some green copper stain in that shaft, mostly iron shows in that, brown iron stain, than anything else. The green stain appeared in shaft No. 1 along the coating of the seams in the altered material; in fact, that surface,—work is so close to the surface that it is all altered, and as you go away from this stain and iron, as you go out, you have got to go to a considerable distance in the cross-cuts before you find any mica along the cross-cut; if there had been mica there I would have had a different opinion.

I worked in the Blue Bird, and the country rock around there is granite, more of what they term a sandy granite, and in the walls there is mica, but not inside of the vein; white granite is peculiar on account of lack of mica; very often you [1340] find that white granite carrying high values in silver; in fact, in the Silver King, during that litigation there, I found in sampling there that the granite, where it was not altered to a very great extent, carried high values,—out here next to Missoula Gulch. White granite in some places might be termed country rock, but if it is mineralized it would not be country rock, if it was of commercial value. The absence of mica is something you cannot depend upon in all cases as

(Testimony of I. H. White.)

indicating a vein; in fact, I never found anything, any rule that you could go by in working underground workings that would define the thing definitely in there. I found no more talc in shaft No. 1 than a slight selvage in the seams; I would not consider it hard; in going east in this cross-cut toward the Olivia shaft, I found nothing that I would consider a true wall; in fact, it is too close to the surface for any one to determine whether it is a true wall. The principal mineral indications there are iron; I consider any time you find iron near the surface,—the iron is the first to leach; they will naturally go below and deposit, and of course, next to the surface there is nothing left but the iron; I am speaking of veins or anything that is open enough to let the solutions go down; I did not see any iron stains that you would consider, in the granite, where it carried the mica; iron stains are not confined entirely to veins because the iron stain, if the granite is open enough to let the solution through, of course it will stain down as far as it stains in any kind of material, any kind of rock; I never assayed anything outside of what I considered vein matter. I was on my way to Seattle on a case down there, and I met Mr. Clark; I have known him for a long time, thirty years; we are old acquaintance, and in talking over this case the Winchell [1341] proposition came up, and he wanted me to give him an idea where I considered Mr. Winchell had been mistaken in his ideas. I am not related to Mr. Clark; my acquaintance with him has been places where I was working; he was en-

(Testimony of I. H. White.)

gineer where I was foreman of the property west of Walkerville some year and a half or such a matter. Outside of that my acquaintance with him is simply meeting him here in the city; I stopped over on my way to Seattle to meet Mr. Hodgens on his way from New York; I got in here Monday evening and stayed over Sunday evening, at the request of Mr. Hodgens; I got back from Seattle last night; I have not stopped over in regard to this.

(At this time it was stipulated between the solicitors for the respective parties that, owing to the fact that the witness I. H. White was compelled to leave the city at once, and being a nonresident, that his signature to the foregoing deposition should be waived.)

**[Testimony of P. A. Stevens, for Defendants
(Recalled in Surrebuttal).]**

[1342] P. A. STEVENS, heretofore duly called and sworn as a witness on behalf of the defendants, being recalled, testified as follows:

Direct Examination.

(By General NOLAN.)

The WITNESS.—I examined the cross-cut in the deep shaft on the northerly lead made by Mr. Mason since the last hearing.

Q. Do the disclosures in that cross-cut in any manner change the views heretofore expressed by you as to the existence of a lead in the shaft, having an easterly and westerly course and a northerly dip?

By Judge BOURQUIN.—Objected to as incompetent, in that it is not surrebuttal testimony, and also

(Testimony of P. A. Stevens.)

for the reason that it calls for a conclusion of the witness.

A. This last visit, or the visit that I made down the shaft lately, is the first time I have been down that shaft.

The WITNESS.—I was in the shaft last Friday night, and noticed a cross-cut running to the south in the shaft.

Q. What were the indications there as to whether that was a fault running north and south, or whether it was a lead running east and west?

By Judge BOURQUIN.—Objected to as heretofore, and it may all go in subject to the objection?

By General NOLAN.—Yes, sir.

A. It shows to me good ledge matter, with one very well defined wall running east and west. All the stratas that shows in the cross-cut and also in the shaft has an easterly and westerly course.

[1343] The WITNESS.—I also made an examination of a cross-cut extending from the Olivia discovery shaft to the No. 1 shaft, and there was a lead exposed in that drift and there is a lead in the wall. When I was in the Olivia discovery on last Friday, the drift extended then west about eight feet; on yesterday afternoon I went out and found that that drift had been continued to No. 1 shaft and was connected to the northeast corner of that shaft, showing the continuation of the wall that is shown in both the east and west sides of the Olivia discovery, and running straight through and striking the same wall on the north side of No. 1 shaft. The lead I encoun-

(Testimony of P. A. Stevens.)

tered in the Olivia discovery, and the lead I encountered in the drift running to the No. 1 shaft, and the lead I found in the No. 1 shaft, are the same, running straight through; it is the hanging-wall. I got samples recently for the purpose of having them assayed, from this ground, and I took them to Mr. Hocking, the assayer, on East Granite Street, and delivered them to him to assay, and I obtained a certificate from his showing the assay returns from the samples furnished; Defendants' Exhibit No. 115 is the certificate I obtained from him. The first sample is No. 0, which was obtained in the south cross-cut, shaft No. 21,—the small cross-cut running to the south; the assay return from that is one one hundredth in silver, and twelve one hundredths in copper, and seven and nine-tenths per cent iron. The next sample is marked No. 00, and came from the red stratas or streaks around in the bottom of shaft No. 21,—within some two or three feet of the bottom of the shaft, and shows one one hundredths of an ounce in silver, sixteen one hundredths in copper, and seven and four-tenths per cent iron. [1344] The next sample is No. 1, taken from the shaft No. 1, taken from the north side of the shaft, the extreme length of the shaft, and for a distance of several feet up the side of the shaft, and the assay values are one-tenth of an ounce in silver, a trace of copper, and twenty-nine and one-tenth per cent iron. Where I said one one hundredth of an ounce in silver I meant one-tenth; in all of the samples I have testified about up to this time, the silver value is one-tenth of an

(Testimony of P. A. Stevens.)

ounce, in each of them. The next sample is No. 2, taken from the drift run from the bottom of the Olivia discovery shaft,—run west about eight feet; it was not connected at that time; it was run in about eight feet, showing the wall,—the hanging-wall of the lead exposed for a distance of eight feet, and lying on the south side of the drift; this sample was taken the extreme length of that wall, and the returns are one-tenth of an ounce in silver, ten one hundredths per cent in copper, twenty-eight and eight-tenths per cent in iron. The next is sample No. 3, taken from shaft No. 2, from the north side of the shaft, the entire length of the north side of the shaft, and for a distance from the bottom up,—I have not got no notation of how far I took it up,—up and down the shaft for several feet, and on that side that the wall shows; the assay returns are one-tenth of an ounce in silver, twenty-seven one hundredths per cent copper, and twenty-four and one tenth per cent iron. The next sample is No. 4, and was taken in the north cross-cut from the Rabbit tunnel. The north cross-cut is in about,—to the north about twenty feet, I should judge, from the mouth of the Rabbit tunnel. In explaining that sample I would like to state that I found that that cross-cut had been driven to the extent of about ten feet farther than on my last examination. [1345] It extended about two feet in the hanging-wall,—beyond the hanging-wall part of the lead. No. 4 sample comprises three feet of the hanging-wall, of the ore underlying the hanging-wall, or to the south from the hanging-wall,—three feet of the

(Testimony of P. A. Stevens.)

lead, and an average of that ore for a height of three feet from the bottom of the cross-cut. The cross-cut I am talking about now is the north cross-cut in this tunnel, and when I testified before the cross-cut was not driven as far north as it is now; it was in about twenty-five feet, I believe, at that time; it is now driven about ten feet farther, and I have taken samples of all of the new work; No. 4 sample is the first one south from the hanging-wall of three feet, and is one of the samples I obtained in that cross-cut; the returns on sample No. 4 are five-tenths of an ounce in silver, and fourteen and fifty-five one hundredths per cent in copper,—a little better than fourteen and a half per cent. The next sample is No. 5, taken from the same place, continuing south from where the other sample was taken, or starting at a point three feet from the hanging-wall in the north cross-cut and running south for a distance of five feet, taking an average of that three feet high and across the lead for five feet, and the values are one-tenth of an ounce in silver and one per cent and twenty-six one hundredths in copper. The next is sample No. 6, taken at a point directly south, or at a point eight feet south from the hanging-wall shown in this cross-cut, and taken for a distance of two feet, and the returns show three-tenths of an ounce in silver, and nine per cent and fifty-one one hundredths in copper. The next sample is No. 7, taken in the drift,—the east drift, or in this Rabbit tunnel, starting at a point about thirty feet east from the cross-cut already mentioned, and sampling for a [1346] distance

(Testimony of P. A. Stevens.)

along the tunnel there for thirty feet, and about a width of about two feet across the bottom of the tunnel, on the left hand side, on the north side, and up the tunnel for fully half the distance, and at one place taking ore out of the north wall in it for a distance of about one foot, as far in that wall of ore as I could get in; the value of that sample as shown by the certificate is four-tenths of an ounce in silver, and eight per cent and twenty-five one hundredths in copper. The next is sample No. 8, taken a little farther east, some twenty feet east in this tunnel, in the small cross-cut to the north from the north side, where the hanging-wall of this lead is exposed, and also taken twenty feet farther east, or at the extreme breast, where the hanging-wall shows again, this sample comprising ore from both places, as that is the only place that the hanging-wall shows in the face of that tunnel; the returns show four-tenths of an ounce in silver, and eight per cent and seventy one hundredths in copper; a portion of this sample was obtained in the face of the tunnel, at the south side, as the hanging-wall crosses the tunnel, in the last twenty feet, and the balance of the sample was obtained back twenty feet from the face of the tunnel in a small cross-cut that is run in about eighteen inches or two feet in the north wall, where the hanging-wall of the lead is exposed; I combined those two samples because there is practically no difference in the looks of the rock; I am very familiar with that kind of ore out there, and it is the points where the hanging-wall showed in there, and I just combined the samples to-

(Testimony of P. A. Stevens.)

gether. The next sample is No. 9, taken from the Mullins tunnel, the first five feet of the cross-cut running south towards the Gulf shaft,—from the south side of the Mullins tunnel, south for a distance [1347] of five feet, and taken at a distance of two feet up from the bottom of the cross-cut,—south to the Hornet discovery, to the Gulf shaft, as that east side of that cross-cut will wind up against the Gulf shaft,—a distance of five feet and two feet above the bottom of the cross-cut; the sample was taken continuously of the material throughout the distance of five feet, and the returns show three-tenths of an ounce in silver and six per cent copper and forty-eight one hundredths. The next sample is No. 10, and was taken on the same level, in the same cross-cut, south from the Mullins tunnel; I commenced that sample at a point five feet south from the south side of the Mullins tunnel, or where I left off from taking No. 9 sample, and continued for a distance of five feet, and the same distance from the bottom of the cross-cut as No. 9 sample; No. 10 sample shows returns of one-tenth of an ounce in silver, and one per cent and sixty one hundredths in copper. The next sample is No. 11, and is a continuation from the part where I left off taking No. 10 sample, and runs to the end or corner of the Gulf shaft, which is a distance of six feet, taking two feet above the bottom of the cross-cut; these samples are all taken along the east side of the south cross-cut, and the sample yielded one-tenth of an ounce in silver, and one per cent and twenty one hundredths in copper. The next sample

(Testimony of P. A. Stevens.)

is No. 12, taken from the west side of this south cross-cut, between the Mullins tunnel and the Hornet shaft, starting from a point directly west from the corner of the Gulf shaft, or from where I left off taking No. 11 sample, and running south a distance of five feet, taking two feet,—a streak along two feet up from the bottom of the cross-cut; sample 12 shows one-tenth of an ounce in silver, and two per cent in copper and eight one hundredths. [1348] Sample No. 13 was taken from a point from where I left off with sample No. 12, or at a point five feet north from the corner of the Hornet discovery shaft, and running south a distance of five feet, to the north side of the Hornet discovery shaft, two feet above the bottom of the cross-cut, and shows one-tenth of an ounce in silver, and two per cent and sixty-four one hundredths in copper. Sample No. 14 came out of the Hornet discovery shaft, and was taken from the north side on a level, at a point that would be on a level with where I left off taking sample No. 13,—on a level with that,—running around and along the north side of the shaft, and also the east side of the shaft on that level, and for a distance of about three feet east and west on the north side of the shaft, and about,—what did I say,—four feet,—and about three feet across the east end of the shaft, and shows two-tenths of an ounce in silver, and six per cent copper and thirty-seven one hundredths. Sample 15 was taken down in the Hornet discovery shaft at a point about seven feet above the bottom; that was taken between the upper cross-cut running north, and the lower cross-

(Testimony of P. A. Stevens.)

cut running north, which brings it, at that point, about seven feet from the bottom and was taken from the east side and the west and north sides of the shaft, running right around the shaft at that point, with three sides; No. 15 returns a value of two tenths of an ounce in silver, and five per cent and forty-five one hundredths in copper. Sample No. 16 was taken in the lower cross-cut running north from the bottom of the Hornet discovery shaft, taken on the west side of the cross-cut, the extreme length, or for a distance of somewhere in the neighborhood, of twenty-five feet taken at a height of about two feet from the bottom of the cross-cut all the ways around; No. 16 returned a value of [1349] one-tenth of an ounce in silver, and two per cent copper and fifty one hundredths. Sample No. 17 was taken from the so-called hanging-wall in the drift that underlies the Mullins tunnel, I should judge about ten feet below the Mullins tunnel,—something like that,—from a fault that shows there, east a distance of about twenty feet, taking practically an average sample of the whole wall that stands there, and in several places in for several inches, where the ore was broken out so I could sample,—kind of a general sample of that so-called hanging-wall, I believe, of the Mullins vein; it is all ore that I sampled, and several points, especially in the east end where I could pull down some of it, I pulled back for a foot and took that in along with the sample; No. 17 returns a value of two-tenths of an ounce in silver, and six per cent and ninety-four one-hundredths in copper.

(Testimony of P. A. Stevens.)

By General NOLAN.—This is offered in evidence (referring to Defendants' Exhibit No. 114).

By the EXAMINER.—It will be received.

The WITNESS.—The samples I took was as fair an average as it was possible for me to take my samples, and the samples, according to my opinion, give a good representation of the rock showing; I make that assertion from my knowledge of the character of that kind of ore in that community, my experience in sampling and mining and handling it; I have handled ore similar to this in the Bullwhacker, and in the Sarsfield also, which lies a little north of them.

[1350] Cross-examination.

(By Judge BOURQUIN.)

The WITNESS.—Some parts of the ore which I took out of my lease on the Bullwhacker is like the ore in the Mullins vein; the stained granite is very similar to what showed in the upper workings. I have observed the ore that is now in the Bullwhacker bins, and that is what I call stained granite; that is a silicate ore, what is in there; it don't come out of a vein,—it comes out of a fault or dyke; that is what I was working in the Bullwhacker, and I was taking ore out of the Bullwhacker like is in those bins. The ore that did pay that I took out of the Bullwhacker is very similar to some of the ore that is in this ground,—very similar in character, but not exactly like it; the ore I mined in the Bullwhacker was much heavier than anything that showed there, that is, of the common run; the material exposed in the cross-cuts from the Hornet shaft is stained granite,

(Testimony of P. A. Stevens.)

with here and there a little cuprite,—sulphides through it; I call cuprite sulphide ore; I don't know what else you can call it, and when I say there was sulphide exposed in the material exposed in the cross-cuts from the Hornet shaft, I have reference to cuprite; I did not see any this time when I was sampling, but I saw it before when I was taking samples for this court, along the bottom of these cross-cuts; I did not see any cuprite where I sampled in the Hornet cross-cuts, but I could not help see it all along the bottom of the cross-cut, laying loose; I do not remember that I saw any in the walls of the cross-cuts, because I was not looking down at the bottom, because I was taking my sample from a certain point; I do not think that I noticed a seam [1351] with cuprite in it; there might have been a seam, a seam that was a little greener, or a seam that would lead, maybe, up to a little bunch of cuprite, but I do not remember that there was any of it in those samples; in taking my samples I did not cross many of those seams filled with green material, but there were some; I took a general sample of everything I crossed. The green filling of the seals I crossed is the same green that is in the rock that was shown on the table here; it was not chrysocolla, because chrysocolla don't lay in there very much; I did not see any chrysocolla in those Hornet cross-cuts; in fact I did not break any of the rich ore, which would show the chrysocolla; I mined two streaks that was solid chrysocolla and copper wax, of two or three feet wide, in the Bullwhacker, and I

(Testimony of P. A. Stevens.)

think I know it when I see it; I did not see anything there that I call chrysocolla at all. I was in shaft 21 Friday evening, and the cross-cut was in south, some eight or ten feet, or a couple of feet,—the top part of it was farther than the bottom; there was a wall showed there, slanting; the top of the cross-cut was in a little farther than that; the bottom of the cross-cut showed where it was slanting, that is where I took No. 0 sample from. This wall I speak of is about seven or eight feet in from the south of the shaft, and by wall there I mean a direct wall running east and west; the material north of it I call ledge matter, and on the south of it it looked a good deal like ledge matter too; by wall I mean a very definite dividing line in the country there; I would not call that a striation; I call it a good, well defined wall or seam; I call it wall for this reason, that this is so much the footwall part of it, or the under part of that is so much harder than the top part of it; consequently I have got to call [1352] it a wall; I suppose the filling was three-quarters of an inch; there is where I got my sample; I took it off that wall as far as it was exposed; underneath it it was very solid,—a porphyritic quartz,—pretty solid formation at that; it was only opened on a slant, up two or three feet; the cross-cut did not extend several feet south of that,—not where that wall is opened, it did not extend a foot; that was overlying the end of the cross-cut going south; the wall raised up—come up about to a height of two feet, possibly, above the bottom of the cross-cut, and it was then into the breast; it

(Testimony of P. A. Stevens.)

was up within the top of it,—way up then to the cross-cut; that was about, I should judge, four feet or four feet and a half above the wash. The wash come down lower, if I remember right, on the east side of that cross-cut, than it did on the west,—appears to be kind of a sag or a hole, practically a roof of the bedrock,—what it appeared to me to be there. There had not at this time been any channeling on this wall at that time; I did not see any other walls in that cross-cut or in shaft 21; I see seams and stratas running east and west and dipping very much to the north, dipping quite flat. I saw no indication of a fault in 21, and I looked around the walls very thoroughly; I could not see—did not discern any resemblance of a fault in the bottom of shaft 21 whatever; the bottom was clean when I was in it,—all the loose rock was out. I examined the material exposed in the shaft and the cross-cut to determine whether or not there was any drag material in it, as indicative of fault, and did not find any. I do not believe I was in court when Mr. Wilson testified; I took a sample from around that shaft, 00 sample came from the bottom of that shaft; I sampled the red in that shaft,—the red stratas that run east and west and [1353] lie quite flat, dipping to the north, exposed both in the east and in the west end of the shaft, principally in the west end; I took it out of the west end of the shaft, and I gouged that filling that was in those seams out, and that comprises No. 00 sample. The surface of the bedrock, I should judge, was about—I took those up and down that

(Testimony of P. A. Stevens.)

west end of the shaft, the full width of the shaft north and south and up and down, two and a half up,—two and a half feet from the bottom, and across the shaft north and south, and five feet below bed-rock; I took this out of several stratas, to see whether there was any mineral-bearing rock in that shaft, or in that granite; there were several of those red stratas crossing the west end of the shaft, towards the north, from the southerly side towards the north, crossing from the south, down and disappearing down in the bottom of the shaft, and also on the north side; those stratas were from a quarter of an inch to an inch; I call them seams in the apex of a vein; the exposure of the material on each side of the seams was of a talcy, or a decomposed porphyry matter, ledge matter, I call it; I would not say that it was like material found in faults. Ledge matter is whatever comprises the apex of your lead, maybe crushed quartz, maybe granite or porphyry or quartzite, or anything else; porphyry in a fault has not got the same appearance, because generally in a fault you have got the drag, and in the top of the ground you have not got that condition; that is the only reason I say it did not present the appearance of fault material. These red stratas are principally iron, I should judge, and which my samples have demonstrated. Sample No. 0 was taken in the cross-cut; I believe I stated a little bit ago that that sample was taken from the wall that showed in that cross-cut, the wall [1354] running easterly and westerly,—the wall that I saw near the face; I sam-

(Testimony of P. A. Stevens.)

pled better than say two feet high, and two and a half feet long, the full width of the cross-cut; I think two feet and a half would comprise the width of that cross-cut,—two feet up on the wall, and across the cross-cut, two feet and a half, the full width of the cross-cut; the material exposed there is about half, or possibly three-quarters of an inch thick, and that was the width of the seam I sampled for No. 0 sample.

I took sample No. 1 from No. 1 shaft, along the north side; there was iron oxide lying on the wall, on the north wall of the shaft, and also what has been proven later to be what I call the hanging-wall of the lead that has been shown to run through the Olivia discovery and on to No. 2. I took No. 1 on the north side of shaft No. 1, along the north side; the hanging-wall don't lay to the south of shaft No. 1, but it lies to the south of the drift or tunnel, but that does not bring it south of the shaft No. 1, but very little; there is a curve of a very few inches in the last of that tunnel. The tunnel where it enters the shaft is not to exceed two feet wide; the part of the tunnel south of the north wall of the shaft is a very few inches wide; the tunnel, in entering the shaft, broke out the north wall; the south side of that drift or tunnel constituted a hanging-wall of a vein all the way in to the No. 1 shaft; the same hanging-wall on the south side of the drift or tunnel also constitutes the north side of the shaft practically. The north side of shaft No. 1 is practically perpendicular, and that hanging-wall is almost perpendicu-

(Testimony of P. A. Stevens.)

lar; it shows the indication of a seam on the north side of the shaft; what I sampled, this iron oxide, lays practically in the wall there, and is not cut into [1355] so as to show how wide it might be; it composes the wall at that point. I sampled that for my sample No. 1, took it all over the length of that shaft, and up and down for a distance of three or four feet; the iron oxide, to a certain extent, was scattered in places in and on the wall; the wall was not all this iron oxide. No. 2 I took out of the drift running west from the Olivia discovery, out of the south side of the drift, what I called the hanging-wall of the lead; on the north side of that hanging-wall, as exposed in the drift there is white granite, but not aplite; I saw lots of aplite in that cut; I mean the ordinary gray granite showing the mica, but of a more decomposed nature, on account of its close proximity to the surface of bedrock; I did not examine that bedrock very closely, but there possibly would be a little iron in it; the parts I sampled presented almost entirely a plane face of iron oxide entirely covering the south side of that drift; I sampled for a depth of an inch or two; generally this seam was not over half an inch or an inch thick, and I sampled places where it was wider than that; I cannot say what laid to the south side of where I sampled, because I did not cut into it. There was ledge matter on the south side of shaft No. 1, composed of porphyritic quartz, and what I would term as a ledge matter, overlying the top of the lead, just the same as I found,—practically no difference,—in the underlying of the hang-

(Testimony of P. A. Stevens.)

ing-wall of the No. 1, or Olivia discovery. I am not a geologist, and am not in a position to state what that ledge rock is composed of; there was undoubtedly some granite in it; there will be a slight percentage of granite, but I did not see it in this ledge matter, and I did not see aplite in it; I saw porphyry and quartz in it; that is the only minerals or materials that I [1356] could say I recognize as knowing what they are; it is there, as I term it, the top of a ledge matter; it is not crushed and mixed up to any great extent, although it is quite loose. I have observed amongst the numerous exhibits here any of the porphyritic quartz that I say I saw; there should be some here from No. 1 and 2 shafts also. I have seen the exhibits from shafts 1 and 2, and that is what I term porphyritic quartz. No. 3 sample was from shaft No. 2, the north side for the entire length, and up and down from the bottom, several feet; the exposure there is very similar to the exposure in No. 1 shaft. I saw no aplite in shaft No. 2. According to my knowledge, and what I could see, I will say there is no aplite dyke running through there northerly and southerly; it might be called by the geologists aplite, but I don't call it so; I call it porphyritic quartz, the apex of a ledge. I did not see any of that porphyritic quartz running north and south in shaft No. 2. I did not see anything that would correspond in strike or appearance with what Mr. Barker said was an aplite dyke running northerly and southerly in shaft No. 2. In sample No. 2 I did not take in any of this porphyritic quartz. The

(Testimony of P. A. Stevens.)

seam of iron oxide in shaft No. 2 where I sampled for No. 3 was very similar to my samples in No. 1, of the drift running west from the Olivia discovery, half an inch up to an inch; that seam covered the entire face of the north side of shaft No. 2,—the entire length of the shaft east and west,—more prominent in some places along the wall. I have no notation of how high it was going up in the shaft, but if I remember right, about half ways to bedrock, and that shaft is a four by four shaft, has two sets of timbers in it, and the bedrock,—the sample,—the bedrock lies right at the bottom of the second set of timbers. [1357] Those two sets of timbers are short, and I believe my sample was taken about half ways between; that would be about five or six feet up and down the shaft that I took the sample, and that seam covered the north wall of the shaft for that distance up and down and clear across it east and west; the wall of the shaft and the seam seemed to be identical, very little variation; I only included that seam in my sample for the reason that the balance of the ledge was close to the bedrock; I did not consider it would carry but very little mineral, if any. I went in the tunnel about thirty feet, and went in the north cross-cut, the face of the north cross-cut and took sample No. 4, which was an average sample taken three feet wide and three feet high from the bottom of the cross-cut; it covered the three feet from the bottom,—it covered an average of three feet square up from the bottom of the cross-cut; I sampled clean across four or five different

(Testimony of P. A. Stevens.)

streaks for the three feet across; I cut a trench clear across there at three or four different points in the three feet. I took my sample three feet wide across the underlying,—which comprised the three feet underlying the hanging-wall of that lead that has been opened up by Mr. Kemper since I last visited that cross-cut. I measured up three feet from the bottom and I took the sample across it at four different points in that three feet up and down; four different points with respect to elevation; I took the sample the same as I would take it myself, but not having time to go to work and pick down the four or six inches of the whole face of the ore and take it out and cut it down, I took it at those four different points clear across, so as to give the average of the ore in that streak; south of that three foot streak I sampled there was ledge matter; it was partly a [1358] granite ledge,—the largest part of it, silicate of copper through it; the vein in the north cross-cut, comprising all, was ten feet, all one vein; the center of that vein was not as good,—not shipping ore, and not of as good a character of ore as the hanging-wall and the footwall of it. No. 6 was a streak two feet farther south in that north cross-cut; that was the old part of the last cross-cut; when I was in there before Mr. Kemper done this new work of cross-cutting north; I took that sample the two feet, identically the same as I took the sample of the three feet of the hanging-wall of this lead; I started from one side of the streak and shaved a streak off clear across the streak, at three or four different

(Testimony of P. A. Stevens.)

points, for three feet high. I took sample No. 7 in tunnel 31; I started taking it thirty feet east of the north cross-cut, and that brought me right to the end of the fault that lies with a showing in that tunnel. I took the sample west of the fault. I went in the tunnel a distance of thirty feet; that is at a point where the tunnel hits the lead; it cuts off a part of the lead there and runs along and exposes about two feet of the ore in the north side of that tunnel; running east all the ways along for a distance of about thirty feet, I started to take sample No. 7; I took an average of the ore that lies in the north side of the bottom of the tunnel, and it also stands up and down practically the entire side of that tunnel, on the north side, for a distance of thirty feet; I took an average of that ore along the bottom and along the side, and at one point within, I should judge, of eight or ten feet of the fault, or where I stopped taking the sample, there is a hole off out there, and I gouged it and picked it out more with my sampling pick to a distance of about fifteen inches in that [1359] wall, and that went in with my sample also, which was all ore. And that is the way I took No. 7 sample, as it is shown. The vein was exposed in the bottom of the tunnel two feet wide, along the north side of the tunnel; I did not have to clean off the bottom; it stands up prominently above the bottom, where the drift runs in and intersects the lead; I sampled it along the bottom for thirty feet. I sampled at three points at the bottom where the ore was exposed. The first point was a distance of, I should judge,

(Testimony of P. A. Stevens.)

about six feet,—five or six feet,—as it lies where the tunnel intersects the lead at that point. The ore lies there possibly two feet higher than the bottom of the tunnel, and slopes down gradually, and would be for a distance of about six feet before the ore is down level with the bottom of the tunnel, and I sampled lengthways of that six feet, which would be along the footwall side of the vein. It does not disappear in the side of the tunnel; it shows in the side of the tunnel, and it shows in the back; when I took that thirty feet I was at what shows a fault, where the lead is faulted or thrown; on the north-easterly side, going toward the face of the lead, the hanging-wall shows, of that fault to the breast of the tunnel; it lies in a small opening that is made,—or cross-cut that is made in the north side of that tunnel, in about half the ways, from this fault to the breast; in my opinion the vein by that fault was thrown to the south; I could see the vein after I left that fault. I don't know what Mr. Barker testified about it. The hanging-wall, in my opinion, lies about half-ways between the fault and the breast of the tunnel; the hanging-wall then crosses the tunnel and shows very distinctly and plainly in the south side of the tunnel, almost at the back,—a little back from the face, and [1360] in the southeast corner, and dips down in the face. The cross-cut or small opening that I am alluding to in the north side of that tunnel is just about twenty feet back from the breast of the tunnel, on the north side. Referring to Complainant's Exhibit 17, I have reference to this

(Testimony of P. A. Stevens.)

little gouge on the north near the face of the tunnel as the place where I saw the hanging-wall appear, and that in my opinion was the wall of a vein and not a fault; it shows a definite hanging-wall running easterly and westerly right through. Sample No. 8 was taken in that little gouge on the north, back from the face of the tunnel, and also in the tunnel, towards the face, underlaying the hanging-wall. The streak I sampled from shows in the southeast corner a block of ore there,—a kind of a raise,—kind of runs back,—the tunnel is kind of slanting there at the face, and it is possibly a foot,—fifteen inches wide. In taking sample 8 I took the sample clean across what shows in the face; the streak in that small cross-cut was possibly eight or ten inches thick; the granite hanging-wall lay to the north side of it, and on the south ledge granite; we find it in a lot of that country up there. Sample No. 9 in the Hornet tunnel, was the first five feet going south from the Hornet tunnel on the east side of the upper cross-cut, continuously two feet up from the bottom; I sampled a trench clean through; I followed a trench that was made by the defendants, as Mr. Mason told me, as he was holding the candle and the sack; I practically followed in their foot marks, that is, wherever possible—wherever they were visible, and where they were not visible—that was in very few places; at points I saw a trench; I was just about on a level in places, and Mr. Mason held the sack for me; I just cut a small trench through there so as to get a sample of the [1361] rock; it might be an inch at points

(Testimony of P. A. Stevens.)

and two inches at other points, but it depends on how your trench sprawled out; I had a sampling pick. I did not cross any of the streaks of chrysocolla or encounter any cuprite in taking that sample, that I know of, possibly some green stains that were a little more prominent than the average of the rock; I don't know what the rock is composed that I took this sample from, but it is not quite high enough grade to be commercial ore at the present price of copper, but I have seen the day when it was commercial ore; I cannot state what it was composed of. I took sample No. 10 from the end of No. 9, going on south, and took it in the same way, cut a little trench, Mr. Mason holding the sack; I believe that at some points there was a trench very discernible. There was no chrysocolla that I noticed, and there might possibly, at one or two places, have been a stain of cuprites but I don't remember them. Chrysocolla is nothing but a water sediment, deposited from solutions; I could not say that this green staining of the rocks was deposited from solutions, but I would not say it was chrysocolla, neither black nor green, nor copper wax. No. 11 was a continuation of No. 10, taken in the same way; that comprised the distance from the Hornet tunnel to the Gulf shaft, the entire distance, which is sixteen feet, and I believe there was a trench at some points; there is a trench there at points. I did not encounter any streaks of chrysocolla or any cuprite in taking sample No. 11, any more than the rest of the samples. I was not here when Mr. Lin-

(Testimony of P. A. Stevens.)

forth testified; the material through which I took sample No. 11 is all ledge matter; there is bound to be a certain amount of granite in that, possibly more so than would be in some leads that distance under bedrock—that is, they are close to the [1362] apex of bedrock—to the wash. At the point where I ended No. 11 I crossed over to the west side of the upper cross-cut, and then proceeded from that point five feet southerly towards the Hornet shaft, and took sample No. 12 the same as I did the former samples; I noticed a channel there quite frequently as I was sampling across. No. 13 was the last five feet on the west side of the upper cross-cut to the Hornet shaft, and I kept two feet above the bottom in taking all of these samples in the upper cross-cut; I cut a continuous trench and missed nothing. No. 14 was in the Hornet shaft, the north side, and the level of No. 13, and along the north and east side of the shaft; that cross-cut fills very little of the north side of the shaft; I took all of the north side that there was. The north side of the shaft at that point opposite sample No. 13 would reach the west side of the cross-cut two feet above the level of the cross-cut, a little bit west of the corner of the shaft, or the east end of the shaft; the distance there, though, I should judge, is about four feet across the north side of the Hornet Discovery shaft, of which I sampled on a level with where I took the samples from the cross-cut. I started to take sample 14 on the same side I ended with No. 13—turned right to the right; I was on the west side

(Testimony of P. A. Stevens.)

of the cross-cut, coming in here (indicating on map), and I started from that corner and run right along west and sampled it on the north side of the shaft; I had to turn and run west on the north side of the shaft, or in a westerly direction, to take the sample. Then I came back and sampled on the same level, the east end of the shaft, which was much narrower than the west side. I took a continuous sample across the north side and across the east end—I cut a trench across, taking everything in the way as I proceeded, [1363] missing nothing, and that was about two feet above the level of the cross-cut; there might have been some small indications of cuprite in there, as it showed much better there than it did in the cross-cut; I could not say whether I encountered any in taking that sample; I was not paying particular attention to what I was taking; I was taking an average sample at that level; all I took of sample 14 was one continuous streak along the north side of the shaft and one continuous streak along the east side of the shaft, but I cannot say how near to bedrock, as I never measured the bedrock in the Hornet Discovery shaft, but there has been a whole lot of fill—or that shaft was filled, from the surface caving in—and the south side of that shaft—it is impossible to say where the bedrock is. Half ways between the Hornet Discovery shaft and the Mullins tunnel the bedrock is just exactly at the top of the timbers. My sample 14 was not taken close to the top of the bedrock; it would not have been within some four or five feet and may be more of

(Testimony of P. A. Stevens.)

the bedrock. I took 14 on a level with 13, and 13 was two feet above the floor of the upper cross-cut. I should judge it is between four and five feet, possibly more, possibly less, from the point in the Hornet Discovery shaft two feet above the floor of the upper cross-cut, from the top of bedrock, in other words, the top of bedrock in the Hornet Discovery shaft must be six or seven feet above the floor of the upper cross-cut. I dug a trench clear around those three sides of the Hornet Discovery shaft in taking sample 15; I might have encountered streaks of cuprite or chrysocolla in taking that sample; I took an average of that streak; I followed in a very noticeable trench that had already been dug in it, several inches wide, and Mr. Mason was standing on the ladder [1364] holding the sack for me. In the lower cross-cut I took sample No. 16, on the west side of it, for twenty-five feet, commencing at the shaft, two feet above the bottom; we took it all in one sample; the distance, I should judge, is about twenty-five feet, or very close to it. I believe at possibly a few points there were indications of a trench there where samples had been taken, about at that distance, but I cannot say positively that I saw any down there. No. 17 was from the hanging-wall of the drift below the Hornet tunnel, which fault, with reference to the lower cross-cut, was at about the point where it intersected the Hornet vein, in the south side of the cross-cut, or the southeast corner of the cross-cut; it is just about at that point where the cross-cut turns and hits the drift, and I

(Testimony of P. A. Stevens.)

commenced with that fault and sampled for twenty feet east, and included the material in the fault for about one foot as far as I could pick it on the fault wall; there is a strata in there of possibly five or six inches; I did not pay much attention to what was in the fault crevice—just made it my object to sample the ore that showed in that, what I believe has been called the hanging-wall; I picked in the west side of that fault and then sampled, and sampled out to the face. I just went here and there all along and all over it, took what I considered would be an average sample, both up and down and lengthways, and at the east end I dug into the wall a ways; I pulled up the ore there for possibly eight or ten inches, and took some of that ore, that ledge in there across that end, where I pulled it off; Mr. Mason was holding the candle by me, as there was not room enough to get in there side by each, as the fellow says; I marked those samples, kept them in my possession, kept them in my house until the next morning, [1365] brought them down town and delivered them to Mr. Hocking, the assayer, and those are the ones he introduced here and gave his assay certificate for.

By General NOLAN.—That is all our testimony.

By the EXAMINER.—The defendants rest.

(Witness signed testimony before examiner April 9, 1912.)

[1366] By Mr. SHELTON.—At this time the complainant will move to strike out all of the testimony of the witness White relating to the Hidden

Creek claims and the so-called copy of the report of Mr. Winchell concerning the same, for the reason that the same is not surrebuttal testimony, and for the further reason that the same is incompetent and immaterial for the reason that the loss or destruction of the original of such report has not been proven, and further for the reason that Mr. Winchell himself gave no testimony concerning the Hidden Creek properties, and the report in itself is in no way a contradiction of any statement made by Mr. Winchell.

Complainant also moves to strike out the testimony of the witness White concerning the Bonanza claims and the alleged copy of the report of Mr. Winchell concerning the same, for the reason that the same is not proper surrebuttal testimony, and for the further reason that it is incompetent, the loss or destruction of the original of such report not having been proven, and for the further reason that Mr. White, in his testimony, does not undertake to state that he has any knowledge whatever of any underground development or any deposits of ore beneath the surface of the Bonanza claim.

The complainant also moves to strike out all of the other so-called surrebuttal testimony, for the reason that it is not proper surrebuttal testimony at all, and, if admissible at all, would be admissible purely as a part of the defendants' case in chief, and this being a hearing or a taking of testimony under an order of the Court heretofore made fixing the time within which the defendants could introduce testimony in

(Testimony of Chauncey L. Berrien.)

support of its defense, and such time having expired, such testimony could not be considered by the Court without a further order of the Court allowing it to be taken.

[1367] Complainant's Case in Reply.

**[Testimony of Chauncey L. Berrien, for Plaintiff
(Recalled).]**

CHAUNCEY L. BERRIEN, heretofore duly called and sworn as a witness on behalf of the complainant, being recalled, testified as follows:

Direct Examination.

(By Judge BOURQUIN.)

The WITNESS.—I have heretofore testified in this case. I visited the shaft referred to here as shaft 21 this morning. Since I testified before there has been a cross-cut run directly south, or due south from the bottom of shaft No. 21 in which the planes of the Continental Fault, before described, are showing, and along which this cross-cut runs; they pass through and along the east side of the cross-cut,—the fault planes of the Continental fault pass through. On the west side of this cross-cut the ground is shown in its same unaltered state, since the bottom has been dug about a foot; this rock is aplite. The cleavage planes in this aplite are dipping about thirty degrees north. On either side of this cross-cut and the sides of the No. 21 shaft small channels have been along small cracks in the aplite, which have been stained with iron oxide. The cracks in the aplite that the channels have been cut along are the planes in the

(Testimony of Chauncey L. Berrien.)

aplite in which have been deposited iron oxide. They are no more than a half an inch or an inch *with*, similar to many other occurrences in aplite or granite in the Butte District. They may be termed joint planes; they are the natural cleavage planes due to the formation of the erosion,—the breaking up of the aplite, which weathers in that way. [1368] These later workings from No. 21 shaft have disclosed no more showing of anything which might be termed a vein. I noticed that this channeling, especially in the bottom of the shaft, or the walls of this shaft, can be followed from one side down across the bottom to the other, and the course of this channeling was north forty-five east, in the shaft; I do not believe there is anything else of importance there. Going south along the fault planes, they pass through the east side of this south cross-cut. The shaft itself is about north twenty degrees west, in its longer dimensions, and the cross-cut leaving the southerly side of the shaft proceeds due south. I saw no walls that the witnesses testified to yesterday as a pronounced wall about seven or eight feet southerly from the shaft 21; I saw an excavation or a channeling easterly and westerly in course, which was dug out of the material in the walls of this cross-cut; the only appearance of direction was the cut itself; the material showed no course or structure, other than decomposed country rock along and in the Continental fault; the cross-cut south from shaft 21 was run in aplite, and material crushed up in the fault, and in the face of this southerly cross-cut there was country

(Testimony of Chauncey L. Berrien.)

rock, ground up by the faulting, and more or less altered. The entire length of this southerly cross-cut was in fault material, and the eastern half of it,—eastern side,—that is a line,—north and south line running through the cross-cut would show fault material and fault walls on the east side, while on the west side there is less altered aplite. In the cross-cut going south, slickensides showed along the fault wall,—to the center and on the east side; the east side is the only place they showed. I went down the Olivia discovery shaft, which has been dug out since I was out there the last time.

[1369] Q. Well, describe what you observed there.

A. It is a shaft about ten feet deep, four feet by four.

By General NOLAN.—Just a moment. We object to that as not rebuttal. Object to it for the reason that it is taken beyond the time prescribed within which testimony can be taken. I want the record to show that I have not any objection at all to evidence being taken in rebuttal of the evidence as to the new conditions about which no testimony was heretofore given. The witness has testified, or, if he did not testify about the Olivia before, the record was in such a shape so that evidence was competent in reference to it when he so testified.

By Judge BOURQUIN.—Well, we have no purpose in bringing in anything but what might be properly termed rebuttal of the surrebuttal offered by defendants. Incidentally, however, it might involve a

(Testimony of Chauncey L. Berrien.)

description of the Olivia shaft, which, of course, might have been heretofore properly introduced in our case in chief. I think that it was heretofore agreed that after the close of your surrebuttal that we could have some little time for rebuttal of that.

By General NOLAN.—Yes, and I have not any objection at all to that drift, and also in reference to the deep shaft. That undoubtedly is proper, and I do not object to evidence in reference to it.

The WITNESS.—The upper four or five feet is made in the wash. The lower portion, probably six feet, is in granite. Westerly from the bottom of the Olivia discovery a working has been made which has just holed into shaft No. 1. This working is about eight feet long; it is entirely in granite, and on the south and upper portion of this connection there is some iron oxide through the granite, due, undoubtedly, to its proximity [1370] to the wash, which is eight feet deep in No. 1 and four feet deep in the Olivia discovery, showing an inclination which would bring the back of this working within a foot or two, at the most, of the line of wash and bed-rock. There are no signs of vein walls or of vein material in this connection between the Olivia and shaft No. 1; there were joint planes or fractures stained with iron oxide in the new workings from the Olivia to shaft No. 1, but there was no green stain of copper through the workings. The opening from this new working into shaft No. 1 was about six or eight inches; it was not large enough for a man to pass through.

(Testimony of Chauncey L. Berrien.)

Cross-examination.

(By General NOLAN.)

The WITNESS.—The disclosures in the cross-cut in the deep shaft have not modified the views I heretofore expressed in reference to no vein running east and west and fault fissures running north and south; there were not any fault planes disclosed in the shafts running east and west. I testified that the planes that were visible were north and south, but I did not tell you at that time that in the aplite there were joint planes whose direction was east and west; there are no joint planes visible in the shaft whose course is east and west, nor in the cross-cut; there are not any cracks in the aplite whose course is east and west; they are north forty-five east,—that would be half from a line due north and south; the cross-cut runs due south; they do not run across the cross-cut; their dip is thirty degrees north; the correct dip is generally at right angles to the course of a striation or line. [1371] In the case of a line or a break, the dip is at right angles to the strike. The strike of the vein is north forty-five degrees east, which is about like that (indicating),—the strike of it, mind you,—and the dip is down this way (indicating). Now, the strike of it,—a line in that strike or dip, is at right angles to that; the dip is taken at right angles. I give it at right angles to the strike, in the plane of it. If you are talking about the plane of it; the plane of the strike of these fractures,—it is not at right angles to the plane of the dip, but the dip is at right angles to the strike. The dip is the course

(Testimony of Chauncey L. Berrien.)

of the break as it extends into the earth; that is what I call a dip; it is the inclination from the horizontal; the plane of that is not at right angles to its strike, but dips are taken at right angles to a strike.

Q. Why, I am talking about the appearance of the circumstances that present themselves there. I am not going into the field of geology generally. I am simply asking you in reference to the condition,—in reference to that particular break that shows itself in that cross-cut.

By Judge BOURQUIN.—We object, for the reason that, while the dip is taken at right angles to the strike, yet the dip may have any variation and does not depend at all upon the degree of the strike. The question seems to me an incomprehensible one, and the objection is made on that score,—incompetent.

Q. Now, you say that in the case of this fault, this cross-cut is in the fault, or a portion of it,—the eastern portion, in the fault fissure? A. Yes.

[1372] The WITNESS.—The fault is dipping to the east; you see two fault walls and a fault zone in the cross-cut running north and south; the footwall of this fault fissure, which occupies the eastern portion of the cross-cut in its course north and south, is visible there; you can follow it from the northeast corner of the shaft, and passing along through the shaft and through the east side of the south cross-cut, and the western wall of the cross-cut is in aplite,—altered country rock, altered through erosion and fault movement; the western boundary of the cross-cut is in the fault zone, evidently. It cannot be de-

(Testimony of Chauncey L. Berrien.)

terminated just now whether there may be an indefinite fault wall still farther west of that; there are some joint planes in the aplite there with a course north forty-five east; northerly and southerly is where you have a deviation from the direct north and south. There is some cutting in the south cross-cut which is almost east and west, but it did not follow anything definite that I could see; it did not follow any natural line of cleavage; there was not any natural line of cleavage visible where this cutting was done, but there was where the cutting was done; you could see the course of the fractures in the aplite on the west side in this cut,—the west side of this south cross-cut, and their course was about north forty-five east, which I would call easterly and westerly, and you could also call that northerly and southerly, but I would not; I would give it a definite course.

Redirect Examination.

(By Judge BOURQUIN.)

Q. Now, Mr. Berrien, you say you saw some fracture lines adjacent to the cuts in the cross-cut which, of themselves, you say, followed no definite line of cleavage?

[1373] By General NOLAN.—Object to that as not redirect. He has testified about that, Judge.

By Judge BOURQUIN.—I had not quite finished my question, Colonel.

Q. How do you mean that they were adjacent to those lines that were cut?

A. I picked down into the bottom of this cut on the west side of the cross-cut, and the aplite would

(Testimony of Chauncey L. Berrien.)

come off in definite pieces, showing the direction of the cleavage of the aplite.

Q. And what was its direction with reference to the direction of the cuts?

By General NOLAN.—To that we object likewise as not redirect examination.

A. It was practically the same as the channeling across the shaft.

The WITNESS.—It was practically the same as the direction of the cuts themselves in the shaft; you take the dip of the fracture of a vein at right angles to the strike, but the dip thus taken is not controlled at all by the strike, in reference to the number of degrees the dip has; it can be anything from zero to ninety degrees.

**[Testimony of Frank A. Linforth, for Plaintiff
(Recalled).]**

[1374] FRANK A. LINFORTH, heretofore duly called and sworn as a witness on behalf of the complainant, being recalled, testified as follows:

Direct Examination.

(By Mr. SHELTON.)

The WITNESS.—I made a further examination of shaft No. 21 since I testified before this morning. From the bottom of shaft 21 a tunnel has been run southerly for a distance of about twelve or fifteen feet, but I should call it a drift—

By General NOLAN.—We object to that as not surrebuttal. If there is any evidence that is contradictory,—I do not suppose there is any question about the running of that drift,—we are simply getting

(Testimony of Frank A. Linforth.)

into this record a lot of stuff that has not any place there. Now, if there is any evidence that he desires to give contradictory of ours, why, it is proper surrebuttal.

By Mr. SHELTON.—You can make your objection and we will go ahead.

By General NOLAN.—Well, I shall object to it, and, of course, if we are going to go into this, I shall object on the ground that there is not any authority for the taking of this evidence. If there is any evidence at all that they desire to use in contradiction of our evidence, I have not any objections to it, but there is not any question about the running of this drift. This is merely corroborative of it. If there is evidence contradictory of it, let us have it. Now, if there is any evidence about lines or courses or anything of that kind, let us get to it.

The EXAMINER.—Well, it seems to be simply preliminary.

[1375] By Mr. SHELTON.—You say that none of the testimony that we are now taking is testimony in reply,—is to be considered as offered at all. If our motion to strike out the so-called surrebuttal testimony on the part of the defendants is sustained but the question now put to the witness is merely to define the place about which he is to be questioned. We have to ask him, of course, what ground he made an examination of before we can ask him what he saw there.

By General NOLAN.—Why, no, he is telling us about the running of a cross-cut. That is not contra-

(Testimony of Frank A. Linforth.)

dictory of anything we introduced. This is simply listening to a lecture.

A. This tunnel is what I should call a drift on the branches of the Continental fault, found and testified to heretofore, and I did not find the course of that fault on both sides of the shaft and on both sides of this new work. There have been cut some channels which make certain exposures, one of them, notably, at a point close to the bottom and near the south face of this new drift, shows the only exposure of rock which can be classified, and it is aplite, the joint planes of which can be seen, and which dip northerly about thirty to thirty-five degrees. Now, in the sides of the shaft there have been cuts made on similar joint planes,—similar to this extent. The bottom of that shaft is in material so altered that it is difficult to say what the rock species is, but these joint planes—

By General NOLAN.—We object to that as not responsive to the question. That is not the way of presenting rebuttal. We simply have a lecture here. I submit, if the Court please, if there is any evidence contradictory of our evidence, it ought to be elicited by question and answer. This thing of putting a [1376] geologist on the stand and giving a lecture at this stage of the proceedings is not a practical way of submitting this rebuttal evidence. Now, there is not any contradiction about this cross-cut. That is not rebuttal. There is not any contradiction yet in any testimony that he has given. The evidence that he gives in reference to those cuts is simply corroborative. Now, if there is any evidence contradictory

(Testimony of Frank A. Linforth.)

of our evidence, that is rebuttal evidence. This thing of putting a witness on the stand and going through a course of sprouts, without any evidence at all, to be confined within certain limits. That is not any way of conducting the examination of a witness. I cannot tell whether it is responsive to a question or not. I could intelligently object if questions were put.

By the EXAMINER.—Well, I think counsel can pursue their own course in the matter of introducing evidence. This certainly refers to the new cuts made on the ground.

A. These channels that have been cut in the sides of the shaft and in the sides of the drift may be seen directly opposite each other across the drift, so that a line between them might be east and west, but if we take one of them and note the exposure in it and follow it without removing your finger from it to the cut to which it leads to on the opposite side, the strike or course of that seam is northeast, so that there are no east and west fissures, breaks or geological phenomena in that working. The strike of the joint planes or cracks in the aplite I have been speaking about is north forty-five east, or thereabouts. In going south in this tunnel I find the wall of the Continental fault, heretofore testified to,—the one which appeared on the east side of the shaft, and it can now be seen along the east side of the drift and close [1377] to the face; the dip of the Continental fault shown in the cross-cut to the south is very nearly vertical, within a degree or two. This cross-cut at the east side is the typical fault material; at the west side, it is the less altered aplite to which I referred, and

(Testimony of Frank A. Linforth.)

which showed the dip and strike; I should call it a drift on the Continental fault; I use the term "drift" to indicate an opening made in the direction of the geological formation in which it is being drawn; it may be a vein or a fault; the east side shows the typical fault material; the west side shows the aplite whose course and dip I have referred to. In the face of the drift, on the east side, the fault material is visible,—the east half of the face. The slickensides observed are those observed in the shaft itself, at my original examination. The exposures in the channels are all iron oxide mud, which disappears as soon as you get away from the top of the wash and has no slickensides,—at the top of the bedrock instead of the top of the wash, I meant to say. There is no mineralization in any of these cracks or joint planes of the aplite; there is an infiltration of a little mud, made of the iron oxide, and is extremely local; it does not carry mineral. The mud is partially composed of iron oxide. I presume by "mineral" you meant what we referred to heretofore. I have made an examination of the new work connecting the Olivia discovery with shaft No. 1, and there is no indication of a vein whatever. The exposures in the cross-cut are clearly granite, very plain. At the south side of the Olivia shaft a more silicious phase of the granite appears, in which short cracks occur, cracks of very limited extent, not connected with vein formation or structure in any way, and the usual iron oxide filling found in cracks in the surface granite anywhere, is found there. [1378] The green stain is absolutely

(Testimony of Frank A. Linforth.)

lacking in that particular locality, and the green stain is lacking in shaft 1 and the opening between shaft 1 and the Olivia. The opening connecting the cross-cut with shaft No. 1 is an irregular hole, not to exceed eight inches across.

Cross-examination.

(By General NOLAN.)

The WITNESS.—There is no evidence of a lead in the cross-cut extending from the No. 1 shaft to the Olivia shaft, and there is no evidence that I could discover of any hanging-wall, nor any wall at all; there is only such dividing line there as comes from the more silicious phase of the granite and the fresh granite, which is irregular, of short length and indefinite. The joint planes pass out of the south side of the Olivia, so that granite appears in both sides of the connection, close to the No. 1 shaft. In the case of the cross-cut from the deep shaft, if you speak of a joint plane, assuming that it is a line of cleavage in the aplite or in the granite, if it has a northerly and southerly course, it could not have an easterly and westerly course in the same distance; that would be impossible. I noticed joint planes at the end of the drift, and their course is northeasterly a few degrees from north,—north forty-five east. None of the cuts indicate an easterly and westerly course in themselves; I say that a line from a cut on one side, drawn to a cut on the other side might be an east and west line, but following around the exposure made by the cut, it will miss the cut on the other side, which exposes the same joint plane; the course of that is

(Testimony of Frank A. Linforth.)

northeasterly. [1379] The joint planes have a northeasterly course where they can be seen. They are seen in the fresh rock at but one point, and are visible by means of the infiltration mentioned in these other points; they can be seen, and they should be traced from point to point without removing the finger from the phenomena in question; your examination is more complete if you trace absolutely from point to point without ever losing the connection, but without using the finger you can see the line with the naked eye; by simply depending upon the eye, there is likely to be a deception unless you trace the line with the finger, for the purpose of determining its actual course. The footwall of this fault fissure that occupies the eastern portion of the cross-cut has a northerly and southerly strike, and may be seen there.

Redirect Examination.

(By Mr. SHELTON.)

The WITNESS.—When a vein or a fault is vertical, the foot or the hanging-wall is an indeterminate term and, furthermore, the fault is composed of so many fissures that you would refer to the footwall of each separate fissure, and not to the footwall of the fault, which is another indeterminate quantity.

(Signed by witness before examiner, April 10, 1912.)

[**Testimony of Simeon V. Kemper, for Plaintiff
(Recalled).**]

[1380] SIMEON V. KEMPER, heretofore duly called and sworn as a witness on behalf of the complainant, being recalled, testified as follows:

Direct Examination.

(By Judge BOURQUIN.)

The WITNESS.—I have visited and seen the new work done in shaft 21, and between the Olivia and shaft No. 1. The drift southerly from shaft 21, which has been run since the main part of this hearing, contains about the same, or exhibits about the same conditions that the shaft itself did in the bed-rock; in that southerly drift, the fault plane, or one line of movement in particular, is very well defined,—that a line that I spoke of before is continued southerly in this drift the whole length of it; it shows in the face of the drift, there being clay or finer ground up material on the east of it than there is on the west. I don't know what the material is on the west side of that drift to the south; it is harder than it is on the east, and it seems to be less altered material. I did not take the course of any fractures running across that southerly drift, but there are some, which are evidenced by the red stain, or iron oxide that is in them; they appear more on the west side than they do on the east; they do not run directly at right angles to the drift; I do not know what their course is; Mr. Berrien and Mr. Linforth were with me this morning, but I did not see them taking the course of that.

Q. What about the channeling that has been done

(Testimony of Simeon V. Kemper.)

in that drift in reference to the exposure in them?

A. Well, there has been some channeling,—pick work,—done [1381] there, which appears to be a bluff, which appears to endeavor to lead an observer to think—

By General NOLAN.—Just a moment. Move to strike that out as not responsive to the question, and also as expressing an opinion in reference to a matter that is beyond his province.

Q. Just tell us what this channel exposes, if anything.

A. There are channels both on the east side and the west side of that drift. Some of them expose this red material, that lay in cracks, and some expose nothing.

The WITNESS.—Some of them have cracks showing in them, and some have not. Some of the cracks are outside of these channels. They may have been run along some of these cleavage planes, and some of them are not. In the connection between shaft 1 and the Olivia discovery I observed about the same conditions that there is in the Olivia discovery, or in shaft No. 1; that connection is run in granite; there is no vein or any wall of a vein, nothing showing to indicate a vein; there is considerable stain in that connection in spots, red stain,—looks like it might be iron stain; there is absolutely no green stain visible there.

Cross-examination.

(By General NOLAN.)

The WITNESS.—I made an examination of the new workings, the cross-cut, but not the connection between the Olivia and the tunnel, until this morning,

(Testimony of Simeon V. Kemper.)

in shaft 21. In the case of the cross-cut from shaft 21 there is one well-defined line running, through the entire distance north and south, but in places it disappears in places; that is apparent in the shaft and where the drift south leaves the shaft, it leaves this line I speak [1382] of, hidden in the east side, and then it appears again further on in the drift; one of those channels is right in the shaft; on the east side there is a cutting into the material, and I do not observe any difference between the cut and the material adjacent to the cut. That is all about the same kind of material,—country rock; no evidence of any lead at all; there was a great deal of granite in there; there is some little aplite showing in there, what they call aplite; I do not know what it is; there is no continuous line of demarcation visible between the aplite and the granite; there are places you can distinguish between the aplite and fresh granite; and it runs rather easterly and westerly.

The following are copies, in substance, of exhibits introduced:

[Complainant's Exhibit No. 1.]

[1383] (No. 443. In Equity. Compl. Exhibit No. 1. Oliver T. Crane, Examiner.)

Article No. 27117. (Domestic.) No. 17061.

UNITED STATES OF AMERICA.

STATE OF WASHINGTON.

OFFICE OF THE SECRETARY OF STATE.

I, I. M. HOWELL, Secretary of State of the State of Washington, do hereby certify that ARTICLES OF INCORPORATION of the WASHINGTON-

BUTTE MINING COMPANY (Spokane) were, on the 2 day of February, A. D. 1910, at 11:24 o'clock A. M., filed for record in this office and recorded in book 85, page 322, Domestic Corporations.

In Testimony Whereof, I have hereunto set my hand and affixed hereto the Seal of the State of Washington. Done at the Capitol at Olympia, Mch. 17, A. D., 1910.

I. M. HOWELL,
Secretary of State.

[The Seal of the State of Washington]

Filed and entered Apr. 17, 1912. Geo. W. Sproule,
Clerk. By Harry Drumm, Deputy.

[Complainant's Exhibit No. 2.]

[1384] (No. 443. In Equity. Compl. Exhibit No.
2. Oliver T. Crane, Examiner.)

Article No. 27117. Certified Copy No. 4251.

UNITED STATES OF AMERICA.

THE STATE OF WASHINGTON.

DEPARTMENT OF STATE.

TO ALL TO WHOM THESE PRESENTS SHALL
COME.

I, I. M. Howell, Secretary of State of the State of Washington, and custodian of the Seal of said State, do hereby certify that I have carefully compared the annexed copy of the ARTICLES OF INCORPORATION OF THE "WASHINGTON-BUTTE MINING COMPANY" (of Spokane, Wash.), with the original copy of said original Articles of Incorporation now on file in this office, and find the same to be a full, true and correct copy thereof, and of the whole of said original, together with all official endorsements

thereon. And I further certify that the said original Articles appear to have been duly and regularly filed in this office, according to law, and that the same are of a genuine, valid and subsisting character, and that this certificate is in due form and by the proper officer having the legal custody of said original and the requisite official knowledge relative thereto.

In Testimony Whereof, I have hereunto set my hand and affixed the Seal of the State of Washington. Done at the Capitol at Olympia this 14th day of Feby. A. D. 1910.

I. M. HOWELL,
Secretary of State.

By _____,
Assistant Secretary of State.

[The Seal of the State of Washington, 1889.]

[1385] No. 27117.

ARTICLES OF INCORPORATION OF

WASHINGTON-BUTTE MINING COMPANY:

KNOW ALL MEN BY THESE PRESENTS:

That we, the undersigned, E. S. Shields, S. V. Kemper, W. A. Kemper and A. L. Palmer, citizens of the United States, and residing at Butte, Silver Bow County, Montana, and A. W. Witherspoon, a citizen of the United States, and residing at Spokane, Spokane County, Washington, have associated ourselves together for the purpose of forming, and do hereby form, a body corporate, under the laws of the State of Washington, and for such purpose do hereby certify to and subscribe written articles of incorporation, as follows, to wit:

I.

The name of the corporation hereby formed shall be and is "WASHINGTON-BUTTE MINING COMPANY."

II.

The purposes for which this corporation is formed are as follows, to wit:

1. To prospect for, to locate, and acquire by location, purchase or other lawful means, mines and mining claims, and to buy, sell, deal in, lease, own, operate and develop mines and mining claims, and generally to carry on a quartz and placer mining business.

2. To carry on the business of mining and smelting and the extracting of minerals from ore and mineral bearing rock, and to transact generally the business of mining, smelting and the reduction of ores and minerals.

3. To control, own, operate, buy, lease, bond or otherwise acquire mines and mining claims, and lands and real estate, and put all such property upon the market in such way and in such manner as may be most advantageous to the corporation, and to borrow money for the purposes of the corporation, and to execute and deliver the [1386] notes or other obligations of the corporation therefor, and for the purpose of securing any loan or loans procured on behalf of the company, and for the purchase, operation or development of any such property or the operation of any such mine or mines, or manufacturing plants, to bond such property or any part thereof, and to offer such bonds for sale, and generally to do all things

necessary or proper in the matter of carrying on the business of the corporation under these articles.

4. To carry on and transact a general logging, lumber, sawmill and real estate business in the states of Washington, Idaho and Montana, and elsewhere, and to acquire by location, purchase or other lawful means, timber and timber lands, and to build, construct, own and operate, buy and sell, sawmills, planing mills and such other manufacturing plants as may be necessary or proper in carrying on a general lumber and sawmill business under these articles; to locate, purchase, own and use millsites and water rights in the states of Washington, Idaho, Montana and elsewhere, and to build, own and control, buy and sell, such millsites and water rights, ditches and flumes, as may be necessary and proper in connection with the use of said water for power, irrigation and other useful purposes; to buy, sell, mortgage, rent trade in or otherwise dispose of any of the property acquired as aforesaid by said corporation; to conduct a general mercantile business, and to buy or otherwise acquire, and to sell or otherwise dispose of, all classes of personal property.

5. To buy, sell and deal in, own and control, corporate bonds, stocks and other securities.

III.

The principal place of business of this corporation shall be the city of Spokane, Spokane County, Washington.

IV.

This corporation shall exist for a period of fifty years.

[1387] V.

The directors of the corporation hereby formed shall consist of five persons, and the names and *resides* of those appointed for the first six months, and until their successors are elected and qualified, are as follows, to wit:

A. W. Witherspoon, residing at Spokane, Spokane County, Washington.

E. S. Shields, residing at Butte, Silver Bow County, Montana.

S. V. Kemper, residing at Butte, Silver Bow County, Montana.

W. A. Kemper, residing at Butte, Silver Bow County, Montana.

A. L. Palmer, residing at Butte, Silver Bow County, Montana.

VI.

The amount of capital stock of this corporation shall be Two Hundred Thousand (\$200,000.00) Dollars, consisting of twenty thousand (20,000) shares of the par value of Ten (\$10.00) Dollars per share.

VII.

Of the capital stock of the corporation the following has been subscribed:

By A. W. Witherspoon,	1 share,
By W. A. Kemper,	1 share,
By S. V. Kemper,	1 share,
By A. L. Palmer,	1 share,
By E. S. Shields,	1 share,
By E. S. Shields, Trustee,	19,995 shares.

VIII.

The stock of this corporation shall be assessable.

IN WITNESS WHEREOF, the parties hereto have hereunto set their hands and seals this 28th day of January, 1910.

E. S. SHIELDS. [Seal]

S. V. KEMPER. [Seal]

W. A. KEMPER. [Seal]

A. L. PALMER. [Seal]

A. W. WITHERSPOON. [Seal]

[1388] State of Montana,
County of Silver Bow,—ss.

I, L. M. Schott, a Notary Public in and for the State of Montana, do hereby certify, that on this 28th day of January, 1910, personally appeared before me, E. S. Shields, W. A. Kemper, S. V. Kemper and A. L. Palmer, to me known to be the individuals described in, and who executed the within instrument, and acknowledged to me that they signed and sealed the same as their free and voluntary act and deed, for the uses and purposes therein mentioned.

Given under my hand and official seal this 28th day of January, 1910.

L. M. SCHOTT,
Notary Public for the State of Montana, Residing at
Butte.

My commission expires December 13th, 1912.

[L. M. Schott—Notarial Seal—State of Montana.]

State of Washington,
County of Spokane,—ss.

I, W. J. C. Wakefield, a Notary Public in and for the State of Washington, do hereby certify that on this 31st day of January, 1910, personally appeared

before me, A. W. Witherspoon, to me known to be the individual described in, and who executed the within instrument, and acknowledged to me that he signed and sealed the same as his free and voluntary act and deed, for the uses and purposes therein mentioned.

Given under my hand and official seal this 31st day of January, 1910.

W. J. C. WAKEFIELD,

Notary Public in and for the State of Washington,
Residing at Spokane, Washington.

[W. J. C. Wakefield—Notary Public, State of Washington. Commission Expires *Mar* 28, 1913.]

[Endorsed]: Filed for Record in the Office of the Secretary of State, Feb. 2, 1910, at 11:24 A. M. Recorded Book 85, page 322, Domestic Corporations. I. M. Howell, Secretary of State.

Filed and entered Apr. 17, 1912. Geo. W. Sproule, Clerk. By Harry Drumm, Deputy.

[Complainant's Exhibit No. 3—Notice of Placer Location.]

[1389] (No. 443. In Equity. Compl. Exhibit No. 3. Oliver T. Crane, Examiner.)

NOTICE OF PLACER LOCATION.

NOTICE IS HEREBY GIVEN that a Placer Mining Claim has been discovered at or near the point where this Notice is posted, bearing a valuable deposit of Gold and Clay and that the undersigned who are citizens of the United States or have declared their intention to become such, and are of lawful age, have on this 20th day of December, A. D. 1890, under

the provisions of Chapter VI of Title XXXII, of the Revised Statutes of the United States, and acts amendatory thereto, located a Mining Claim to be known as the Butte and Boston Placer Mine, situated about two miles east of the eastern limits of the City of Butte, in unorganized Mining District, Silver Bow County, State of Montana, the said claim being for forty (or less) acres of surface ground, together with the water existing upon or flowing across the said claim with the right to use and appropriate all or any portion thereof in any manner deemed advisable for the most effectual development and working of the said Placer Mining Claim, and it is the intention of the locators to hold and work the said mine under the said provisions of the said Statutes, and in accordance with the Mining Laws of Montana and the local rules and customs of miners. The adjoining claims are on the north the May Yohe Placer, the Rising Sun Lode and the Copper Queen Lode, on the east the Pacific Lode Survey No. 2320, on the west the east line of Section 17, T. 3 N., R. 7 W. The boundaries and location of the said Mining Claim being more particularly described as follows, to wit:

Beginning at the $\frac{1}{4}$ Section corner on the East boundary of Section 17 in Tp. 3 N., R. 7 W., for the Northwest corner (No. 1) of this claim marked by a post set and running thence Easterly 1900 feet to the northeast corner (No. 2) of this claim, thence [1390] Southerly 700 feet to the Southwest corner of the Pacific Lode claim, Survey No. 2320, which is corner No. 3 of this claim, thence Westerly 200 feet to the Northeast corner of the Bullwhacker Lode Lot

No. 255, T. 3 N., R. 7 W., which is corner No. 4 of this claim, thence westerly along the north line of said Bullwhacker Lode 1500 feet to the northwest corner of said Bullwhacker claim, which is corner No. 5 of this claim, thence Southerly 350 feet to corner No. 9, of the Park City Placer claim, which is corner No. 6 of this claim, thence Westerly 233 feet to corner No. 10 of the Park City Placer claim, for the southwest corner (No. 7) of this claim, thence northerly along the East boundary of said section 17, T. 3 N., R. 7 W., 1320 feet more or less to the place of beginning.

Containing an area of forty acres or less, each corner being marked with a post with the number of the corner.

CHARLES F. BOOTH,
SIMEON V. KEMPER,
WILLIAM V. LAWLOR, .
Locators and Claimants.

State of Montana,
County of Silver Bow,—ss.

Simeon V. Kemper, being first duly sworn according to law, deposes and says, that he is a native-born citizen of the United States, of lawful age and one of the locators and claimants of the Placer Mining Claim mentioned and described in the foregoing Notice of Location and Claim, appearing upon the opposite page hereof, and one of the persons whose names are subscribed thereto as locators and claimants, that he has discovered Gold and Clay within the exterior boundaries of the claim above described, that he knows the contents of the said Notice and

- Statement foregoing, and that the matters and things stated therein are true.

SIMEON V. KEMPER.

Subscribed and sworn to before me this 22 day of December, A. D. [1391] 1890.

[Notarial Seal]

WM. B. SCOTT,
Notary Public.

Filed for Record Dec. 22, A. D. 1890, at 45 min. past 11 o'clock A. M. C. F. Booth, County Recorder.

Then follows certificate of County Clerk and Recorder that the foregoing is a true and correct copy, and that the original is recorded at page 24 in Book "B" of Placer Location Records of Silver Bow County, Montana.

Filed and entered Apr. 17, 1912. Geo. W. Sproule, Clerk. By Harry Drumm, Deputy.

[Complainant's Exhibit No. 4—Bargain and Sale Deed Dated December 23, 1890—Charles F. Booth and Josephine J. Booth and Simeon V. Kemper.]

[1392] (No. 443. In Equity. Compl. Exhibit No. 4. Oliver T. Crane, Examiner.)

BARGAIN AND SALE DEED.

THIS INDENTURE, Made the 23rd day of December in the year of our Lord One Thousand Eight Hundred and Ninety between Charles F. Booth and Josephine J. Booth, his wife, of Butte City, Silver Bow County, Montana, the parties of the first part, and Simeon V. Kemper of the same place, party of the second part, Witnesseth: That the said parties of the first part, for and in consideration of the sum of One (1) Dollar, lawful money of the United States

of America, to them in hand paid by the said party of the second part, the receipt whereof is hereby acknowledged, have granted, bargained, sold and conveyed, and by these presents do grant, bargain, sell and convey unto the said party of the second part, and to his heirs and assigns forever, all of the following described property situate, lying and being in Silver Bow County, State of Montana, and particularly bounded and described as follows, to wit: An undivided one-third $\frac{1}{3}$ interest in and to the "Butte and Boston" Placer Claim, said claim was located on the 22nd day of December, 1890, and the notice of such location is of record on page 25 of Book "B" of Placers, records of said County to which record reference is hereby made for a full and complete description of said claim.

Together with all and singular the tenements, hereditaments and appurtenances thereunto belonging or in anywise appertaining, as usually had and enjoyed.

To have and to hold all and singular the said premises, together with the appurtenances unto the said party of the second part, and to his heirs and assigns forever.

In Witness Whereof the said parties of the first part have hereunto set their hands and seals the day and year first above written.

CHAS. F. BOOTH. [Seal]

JOSEPHINE J. BOOTH. [Seal]

[1393] Duly acknowledged, and recorded at page 500 of Book "S" of Deeds, Records of Silver Bow County, Montana.

Filed and entered Apr. 17, 1912. Geo. W. Sproule,
Clerk. By Harry Drumm, Deputy.

[Complainant's Exhibit No. 5—Bargain and Sale
Deed Dated January 16, 1891—William V.
Lawlor and Margaret N. Lawlor and Josephine
Lorenz.]

[1394] (No. 443. In Equity. Compl. Exhibit No.
5. Oliver T. Crane, Examiner.)

BARGAIN AND SALE DEED.

THIS INDENTURE, made the 16th day of January, in the year of our Lord one thousand eight hundred and ninety-one between William V. Lawlor and Margaret N. Lawlor his wife, of Butte City, Silver Bow County, State of Montana, parties of the first part, and Josephine Lorenz of the same place, party of the second part, WITNESSETH: That the said parties of the first part, for and in consideration of the sum of One (1.00) Dollars, lawful money of the United States of America, to them in hand paid by the said party of the second part, the receipt whereof is hereby acknowledged, have granted, bargained, sold and conveyed, and by these presents do grant, bargain, sell and convey unto the said party of the second part, and to her heirs and assigns forever, all the following described property situate, lying and being in Silver Bow County, State of Montana, and particularly bounded and described as follows, to wit:

An undivided one-third ($\frac{1}{3}$) interest in and to the "Butte and Boston" Placer Claim, said claim was located on the 22nd day of December, 1890, and notice of such location is of record on page 25 of

Book "B" of Placers records of said County to which record reference is hereby made for a full and complete description of said claim.

Together with all and singular the tenements, hereditaments and appurtenances thereunto belonging or in anywise appertaining, as usually had and enjoyed.

TO HAVE AND TO HOLD, all and singular the said premises, together with the appurtenances unto the said party of the second part, and to her heirs and assigns forever.

IN WITNESS WHEREOF, the said parties of the first part have hereunto set their hands and seals the day and year first above written.

[1395] WILLIAM V. LAWLOR. [Seal]

MARGARET M. LAWLOR. [Seal]

Signed, sealed and delivered in the presence of

SIMEON V. KEMPER.

Duly acknowledged by the grantors, and filed for record Jany. 20th, 1891, at 45 minutes past 9 o'clock A. M.

Then follows a certificate by the County Clerk and Recorder of Silver Bow County, Montana, to the effect that the foregoing is a true copy of the original, which appears of record at page 504, of Book "S" of Deed Records of Silver Bow County, Montana.

[Complainant's Exhibit No. 6—Bargain and Sale Deed Dated July 14, 1891—Josephine Lorenz and William Lorenz and William V. Lawlor.]

[1396] (No. 443. In Equity. Compl. Exhibit No. 6. Oliver T. Crane, Examiner.)

BARGAIN AND SALE DEED.

THIS INDENTURE, Made the 14th day of July, in the year of our Lord one thousand eight hundred and ninety-one, between Josephine Lorenz and William Lorenz, her husband, of Butte City, Silver Bow County, State of Montana, parties of the first part, and William V. Lawlor of the same place, party of the second part, WITNESSETH:

That the said parties of the first part for and in consideration of the sum of 'One Dollars, lawful money of the United States of America, to them in hand paid by the said party of the second part, the receipt whereof is hereby acknowledged, have granted, bargained, sold and conveyed, and by these presents do grant, bargain, sell and convey unto the said party of the second part, and to her heirs and assigns forever, all the following described property situate, lying and being in Silver Bow County, State of Montana, and particularly bounded and described as follows, to wit:

An undivided one-third ($\frac{1}{3}$) interest in and to the Butte and Boston Placer Claim said claim was located on the 22d day of December, 1890, and Notice of such location is of record on page 25 of Book "B" of Placer Records of said County to which record reference is hereby made for a full and complete de-

scription of said claim.

Together with all and singular the tenements, hereditaments and appurtenances thereunto belonging or in anywise appertaining, as usually had and enjoyed.

TO HAVE AND TO HOLD all and singular the said premises, together with the appurtenances unto the said party of the second part and to his heirs and assigns forever.

IN WITNESS WHEREOF the said parties of the first part have hereunto set their hands and seals the day and year first above written.

[1397] JOSEPHINE M. LORENZ. [Seal]

WILLIAM LORENZ. [Seal]

Signed, sealed and delivered in the presence of
SIMEON V. KEMPER.

Duly acknowledged by the grantors, and filed for record Mch. 14th, A. D. 1892, at 45 Min. past 9 o'clock A. M.

Then follows a certificate by the county clerk and recorder of Silver Bow County, Montana, to the effect that the foregoing is a true copy of the original, which appears of record at page 249 of Book "3" of Deed Records of Silver Bow County, Montana.

[Complainant's Exhibit No. 7—Bargain and Sale Deed Dated March 14, 1882—William V. Lawlor and Margaret M. Lawlor and Simeon V. Kemper.]

[1398] (No. 443. In Equity. Compl. Exhibit No. 7. Oliver T. Crane, Examiner.)
BARGAIN AND SALE DEED.

THIS INDENTURE, Made the 14th day of

March, in the year of our Lord, one thousand eight hundred and eighty-two, between William V. Lawlor, and Margaret M. Lawlor, his wife, of Butte, Silver Bow County, Montana, parties of the first part, and Simeon V. Kemper of the same place, party of the second part, WITNESSETH: That the said parties of the first part, for and in consideration of the sum of Twelve Thousand (\$12,000.00) Dollars, lawful money of the United States of America, to them in hand paid by the said party of the second part, the receipt whereof is hereby acknowledged, have granted, bargained, sold and conveyed, and by these presents do grant, bargain, sell and convey, unto the said party of the second part, and to his heirs and assigns forever.

All of the following described property situate, lying and being in Silver Bow County, State of Montana, and particularly bounded and described as follows to-wit: An undivided one-half ($\frac{1}{2}$) interest in and to lots three (3), and four (4) in block one (1), Lots One (1), Two (2), three (3), four (4), five (5), and seven (7), thirteen (13), fourteen (14), twenty-four (24), twenty-five (25), and twenty-six (26) in Block two (2); Lots nine (9), ten (10), eleven (11) and twelve (12), in block three (3); Lots eight (8), nine (9), and ten (10), in block four (4); Lots one (1), two (2), three (3), six (6), and seven (7) in Block five (5), of the Lawler and Kemper Addition to Butte.

Also Lots one (1), two (2), three (3) and six (6), in Block six (6), of the Emmet Addition to Butte, and all of Lot nine (9), in block two (2), in the

Lawler & Kemper Addition to Butte, according to the official surveys and plats of the said Additions, now on file in the office of the Clerk and Recorder of Silver Bow County, State of Montana.

[1399] Also all their right, title and interest, in the Belcher quartz lode mining claim, designated as Lot No. 538, T. 3 N. R. 8 W. and the Gambrinus quartz lode mining claim, Lot No. 266 T. 3 N., R. 8 W., including that portion of the surface of said Gambrinus Claim, lying east of Missoula Gulch, and lots eighteen (18), in block two (2), and lot eight (8) in block five (5) of said Lawler and Kemper Addition.

Also all their interest in Section Six (6), in T. 2 N., R. 7 W. Also an undivided one-third ($\frac{1}{3}$) interest in the Butte and Boston Placer Claim, Survey #3379, situated in the North West quarter of Section sixteen (16) T. 3 N. R. 7 W. of the Principal Meridian of Montana.

Together with all and singular the tenements, hereditaments and appurtenances thereunto belonging or in anywise appertaining, as usually had and enjoyed.

To have and to hold all and singular the said premises together with the appurtenances, unto the said party of the second part, and to his heirs and assigns forever.

IN WITNESS WHEREOF, the said parties of the first part, have hereunto set their hands and seals, the day and year first above written.

WILLIAM V. LAWLOR. [Seal]

MARGARET M. LAWLOR. [Seal]

Duly acknowledged, and filed for record March 15, 1892.

Then follows a certificate by the County Clerk and Recorder of Silver Bow County, Montana, to the effect that the foregoing is a true copy of the original as of record at page 294 in Book "1" of Deeds, Records of Silver Bow County, Montana.

[Complainant's Exhibit No. 8—Bargain and Sale Deed Dated June 24, 1892—Simeon V. Kemper and Sallie B. Kemper and James W. Kemper.]

[1400] (No. 443. In Equity. Compl. Exhibit No. 8. Oliver T. Crane, Examiner.)

BARGAIN AND SALE DEED.

THIS INDENTURE, made the 24 day of June, in the year of our Lord, one Thousand Eight Hundred and Ninety-two, between Simeon V. Kemper and Sallie B. Kemper, his wife, of Butte, Silver Bow County, State of Montana, parties of the first part, and James W. Kemper, of the same place, the party of the second part, WITNESSETH: That the said parties of the first part for and in consideration of the sum of Five Thousand (5000.00) Dollars, lawful money of the United States of America, to them in hand paid by the said party of the second part, the receipt whereof is hereby acknowledged, have granted, bargained, sold and conveyed, and by these presents do grant, bargain, sell and convey unto the said party of the second part, and to his heirs and assigns forever, all of the following described property, situate, lying and being in Silver Bow County, State of Montana, and particularly bounded and described as follows, to wit:

The undivided one-half ($1\frac{1}{2}$) interest in and to the "Butte and Boston" Placer Mining Claim, located Dec. 20th, 1890, by C. F. Booth, W. V. Lawlor and S. V. Kemper, said location is recorded at page "25" book "B" of "Placer and Millsite" Records of Silver Bow County, State of Montana, said claim being designated as survey Number 3379.

TOGETHER with all and singular the tenements, hereditaments and appurtenances thereunto belonging or in anywise appertaining as usually had and enjoyed.

TO HAVE AND TO HOLD all and singular the said premises, together with the appurtenances unto the said party of the second part and to his heirs and assigns forever.

IN WITNESS WHEREOF the said parties of the first part have hereunto set their hands and seals the day and year first above written.

[1401] SIMEON V. KEMPER. [Seal]

SALLIE B. KEMPER. [Seal]

Duly acknowledged by the grantors, and filed for record June 30th, 1892.

Then follows a certificate by the County Clerk and Recorder of Silver Bow County, Montana, to the effect that the foregoing is a true copy of the original as it appears of record at page 378 in Book "3" of Deed Records of Silver Bow County, Montana.

[Complainant's Exhibit No. 9—Letters Patent Dated
December 19, 1895, Granted to Simeon V.
Kemper and Josephine Lorenz.]

[1402] (No. 443. In Equity. Compl. Exhibit
No. 9. Oliver T. Crane, Examiner.)

GENERAL LAND OFFICE

No. 26344.

MINERAL CERTIFICATE.

No. 3170.

THE UNITED STATES OF AMERICA.

To all to whom these presents shall come, Greeting:

WHEREAS, In pursuance of the provisions of the Revised Statutes of the United States, Chapter Six, Title Thirty-two, and legislation supplemental thereto, there have been deposited in the General Land Office of the United States the Plat and Field Notes of Survey and the Certificate No. 3170, of the Register of the Land Office at Helena, in the State of Montana, accompanied by other evidence, whereby it appears that Simeon V. Kemper and Josephine Lorenz did, on the fourth day of September, A. D. 1895, duly enter and pay for that certain placer mining claim and premises, designated by the Surveyor General as Lot No. 3379, known as the Butte and Boston Placer mining claim, and embracing a portion of township three north of range seven west of the Principal meridian, in the ——— Mining District, in the County of Silver Bow and State of Montana, in the District of Lands subject to sale at Helena, and bounded, and described, and platted

as follows, with magnetic variation as hereinafter stated. Beginning at corner No. 1, a quartz stone 20 x 12 x 11 inches, marked 1-3379, in mound of earth, being also corner No. 1 of survey No. 2952, the May Yohe placer claim, and the east quarter corner of section seventeen in township three north of range seven west of the Principal Meridian, from which discovery shaft bears south fifty-three degrees and twelve minutes east three hundred and fifteen feet distant. Thence first course, magnetic variation twenty degrees and fifteen minutes east, east four hundred and seventy-three feet across ditch; eight hundred and eighteen feet to corner No. 2, a quartzite stone marked 2-3379, thence, second course, magnetic [1403] variation twenty degrees and fifteen minutes east, south sixty-three degrees and fifteen minutes east eight hundred feet to corner No. 3, a granite stone 20 x 8 x 6 inches, marked 3-3379. Thence third course, magnetic variation twenty-one degrees east, south forty-two degrees and five minutes east three hundred and ninety-eight feet to corner No. 4, a granite stone marked 4-3379; thence, fourth course, magnetic variation twenty-one degrees and thirty minutes east, north eighty degrees and fifty minutes west one hundred and eighty-two feet to corner No. 5, a quartz stone marked 5-3379. Thence, fifth course, magnetic variation nineteen degrees and fifteen minutes east, south seventy-seven degrees and twelve minutes west one thousand five hundred and seven feet to corner No. 6, a quartz stone marked 6-3379.

Thence, sixth course, magnetic variation twenty

degrees east, south twelve degrees and forty-eight minutes east three hundred and ninety-four feet to corner No. 7, a granite stone marked 7-3379. Thence seventh course, magnetic variation twenty degrees east, north eighty-seven degrees west two hundred and thirty-two and five-tenths feet to corner No. 8, a fir post marked 8-3379. Thence eighth course, magnetic variation twenty degrees east, north twelve minutes west one thousand three hundred and thirty-two feet to corner No. 1, the place of beginning; said lot No. 3379 containing twenty-eight acres and twenty-five hundredths of an acre of land, more or less.

NOW KNOW YE, That there is therefore hereby GRANTED by the United States unto the said Simeon V. Kemper and Josephine Lorenz, and to their heirs and assigns, the said placer mining premises hereinbefore described.

TO HAVE AND TO HOLD said mining premises, together with all the rights, privileges, immunities, and appurtenances of whatsoever nature thereunto belonging unto the said grantees above named, and to their heirs and assigns forever; subject nevertheless to the [1404] following conditions and stipulations: First. That the grant hereby made is restricted in its exterior limits to the boundaries of the said mining premises, and to any veins or lodes of quartz or other rock in place bearing gold, silver, cinnabar, lead, tin, copper, or other valuable deposits, which may have been discovered within said limits subsequent to and which were not known to exist on the eleventh day of May, A. D. one thousand

eight hundred and ninety-one; Second. That should any vein or lode of quartz or other valuable deposits, be claimed or known to exist within the above-described premises at said last-named date, the same is expressly excepted and excluded from these presents. Third. That the premises hereby conveyed may be entered by the proprietor of any vein or lode of quartz or other rock in place bearing gold, silver, cinnabar, lead, tin, copper, or other valuable deposits, for the purpose of extracting and removing the ore from such vein or lode, should the same, or any part thereof, be found to penetrate, intersect, pass through, or dip into the mining ground or premises hereby granted. Fourth. That the premises hereby conveyed shall be held subject to any vested and accrued water rights for mining, agricultural, manufacturing, or other purposes, and rights to ditches and reservoirs used in connection with such water rights as may be recognized and acknowledged by the local laws, customs, and decisions of courts. And there is reserved from the lands hereby granted, a right of way thereon for ditches or canals, constructed by the authority of the United States. Fifth. That in the absence of necessary legislation by Congress, the legislature of Montana may provide rules for working the mining claim or premises hereby granted, involving easement, drainage, and other necessary means to the complete development thereof.

IN TESTIMONY WHEREOF, I, GROVER CLEVELAND, President of the United States of America, have caused these Letters to be made

PATENT, and the Seal of the General Land Office to be hereunto affixed.

[1405] GIVEN under my hand at the City of Washington the nineteenth day of December in the year of our Lord one thousand eight hundred and ninety-five, and of the Independence of the United States the one hundred and twentieth.

[U. S. General Land Office Seal]

By the President:

GROVER CLEVELAND.

By M. McKEEN,
Secretary.

L. Q. C. LAMAR,

Recorder of the General Land Office.

(E. G. E.)

Recorded Vol. 236, pages 313 to 316, inclusive.

Filed for record on the 22d day of Nov. A. D. 1901,
at 45 min. past 1 o'clock P. M.

JOHN WESTON,
County Recorder.

Then follows a certificate by the County Recorder that the foregoing is a full and true copy of the original as recorded at page 82 of Book "E" of Patent Records of Silver Bow County, Montana.

[Complainant's Exhibit No. 10—Bargain and Sale Deed Dated June 15, 1895—Simeon V. Kemper and Sallie B. Kemper and the Butte Land and Investment Company.]

[1406] (No. 443. In Equity. Compl. Exhibit No. 10. Oliver T. Crane, Examiner.)

THIS INDENTURE, Made the 15th day of June, in the year of our Lord one thousand eight hundred

and ninety-five, between Simeon V. Kemper and Sallie B. Kemper, his wife, both of the City of Butte, County of Silver Bow, and State of Montana, parties of the first part and the "Butte Land and Investment Co.," a corporation duly organized and existing under the laws of the State of Montana, the party of the second part.

WITNESSETH: That the said parties of the first part, for and in consideration of the sum of One Hundred Thousand (100000.) Dollars, lawful money of the United States of America, to them in hand paid by the said party of the second part, the receipt whereof is hereby acknowledged, have granted, bargained, sold and conveyed, and by these presents do grant, bargain, sell and convey unto the said party of the second part and to its successors and assigns forever, all the following described property, situate, lying and being in Silver Bow County, State of Montana, and particularly described as follows, to wit:

The "Herxes" Lode Mining Claim, designated by the Surveyor General as Lot No. 3684, embracing a portion of Section thirty-six in township three north range eight west of the Principal Meridian of Montana; also the "Jefferson" Lode Mining Claim, designated by the Surveyor General, as Lot No. 3685, embracing a portion of section thirty-six in township three north of range eight west of the principal Meridian of Montana;

Also Section six (6) in township two (2) north of range seven (7) west of the Principal Meridian of Montana, containing six hundred and forty (640) acres, more or less; also

An undivided one-fourth ($\frac{1}{4}$) interest in and to the west one-half ($\frac{1}{2}$) of Section eight (8) in township two (2) north of range seven (7) West of the Principal Meridian of Montana, containing three hundred and twenty (320) acres more or less; also

[1407] All the right, title and interest of the said parties of the first part, in and to the south one-half ($\frac{1}{2}$) of the southwest one-fourth ($\frac{1}{4}$); the northeast one-fourth ($\frac{1}{4}$) of the southwest one-fourth ($\frac{1}{4}$) and the east one-half ($\frac{1}{2}$) of the southeast one-fourth ($\frac{1}{4}$) of the northwest one-fourth ($\frac{1}{4}$) of section nineteen (19), in township three (3) north of range seven (7) west of the Principal Meridian of Montana, containing one hundred and forty (140) acres, more or less; also

The undivided one-half ($\frac{1}{2}$) of that portion of section sixteen (16) in township three (3) north of range seven (7) west of the Principal Meridian of Montana, described by metes and bounds as follows, to wit: Beginning at the one-quarter ($\frac{1}{4}$) section corner, between sections sixteen (16) and seventeen (17) in said township; running thence east eight hundred and eighteen (818) feet, at a point on the end line of the Rising Sun Lode Mining Claim, Lot 246; thence south sixty-three (63) degrees and fifteen (15) minutes east three hundred and seventeen and one-half (317.5) feet; thence south seventy-seven (77) degrees and twelve (12) minutes west three hundred and eighty-seven (387) feet; thence south twelve (12) minutes, east six hundred (600) feet, to the north side line of the Bullwhacker Lode

Mining Claim, Lot 255; thence south seventy-seven (77) degrees and twelve (12) minutes west, along the north side of said Bullwhacker Claim, five hundred and ninety-three and one-half (593.5) feet; thence south twelve (12) degrees and forty-eight (48) minutes east, along the west end line of said Bullwhacker claim, three hundred and ninety-four (394) feet; thence north eighty-seven (87) degrees west, two hundred and thirty-two and one-half (232.5) feet to the section line, between said sections sixteen (16) and seventeen (17); thence north twelve (12) minutes west, along said section line thirteen hundred and thirty-two (1332) feet to the place of beginning, containing seventeen and seventy-one hundredths (17.71) acres, more or less; also

The south one-half ($\frac{1}{2}$) of the Southeast one-fourth ($\frac{1}{4}$); [1408] the northwest one-fourth ($\frac{1}{4}$) of the southeast one-fourth ($\frac{1}{4}$) and the west one-half ($\frac{1}{2}$) of the Northeast one-fourth ($\frac{1}{4}$) of the Southeast one-fourth ($\frac{1}{4}$) of Section thirty-two (32) in township three (3) North of Range seven (7) West of the Principal Meridian of Montana; also

All right, title and interest, in and to a water right in Basin Creek, together with the ditch connecting said Basin Creek with the last above-described property. Notice of Location of said Water right is recorded at page 54 in Book "A" of Miscellaneous Records of Silver Bow County, State of Montana, to which reference is hereby had for a more particular description.

Together with all and singular the tenements, hereditaments and appurtenances, thereunto belong-

ing or in any wise appertaining, as usually had and enjoyed.

To have and to hold all and singular the said premises together with the appurtenances unto the said party of the second part, and to its successors and assigns forever.

In Witness Whereof, we have hereunto set our hands and seals the day and year first above written.

SIMEON V. KEMPER. [Seal]

SALLIE B. KEMPER. [Seal]

Duly acknowledged, and filed for record June 15, 1895.

Then follows a certificate by the County Recorder to the effect that the foregoing is a true copy of the original of record at page 172 of Book 14 of Deed, Records of Silver Bow County, Montana.

[Complainant's Exhibit No. 11—Bargain and Sale Deed Dated June 24, 1895—James W. Kemper and Mary M. Kemper and Simeon V. Kemper and Sallie B. Kemper.]

[1409] (No. 443. In Equity. Compl. Exhibit No. 11. Oliver T. Crane, Examiner.

THIS INDENTURE, Made the twenty-fourth day of June, in the year of our Lord one thousand eight hundred and ninety-five, between James W. Kemper and Mary M. Kemper, his wife, and Simeon V. Kemper and Sallie B. Kemper, his wife, all of the City of Butte, County of Silver Bow, and State of Montana, parties of the first part, and the "Butte Land and Investment Co." a corporation duly organized and existing under the laws of the State of Montana, the party of the second part, WITNESS-

ETH: That the said parties of the first part, for and in consideration of the sum of Sixteen Thousand Two Hundred and Fifty (16250) Dollars, lawful money of the United States of America, to them in hand paid by the said party of the second part, the receipt whereof is hereby acknowledged, have granted, bargained, sold and conveyed, and by these presents do grant, bargain, sell and convey, unto the said party of the second part, and to its successors and assigns, forever, all following described property, situate, lying and being in Silver Bow County, State of Montana, and particularly described as follows, to wit:

An undivided five-eighths ($\frac{5}{8}$) interest, in and to the West one-half ($\frac{1}{2}$) of Section eight (8) in Township two (2) North of range seven (7) West of the Principal Meridian of Montana; also

All the right, title and interest of the said parties of the first part, in and to the "Butte and Boston" Placer Mining Claim, Survey No. 3379, being a portion of Section sixteen (16) in township three (3) north of range seven (7) West of the Principal Meridian of Montana.

Together with all and singular the tenements, hereditaments and appurtenances, thereunto belonging or in anywise appertaining, as usually had and enjoyed.

To have and to hold all and singular the said premises, [1410] together with the appurtenances, unto the said party of the second part, and to its successors and assigns forever.

IN WITNESS WHEREOF, we have hereunto set

our hands and seals the day and year first above written.

JAMES W. KEMPER. [Seal]

MARY M. KEMPER. [Seal]

SIMEON V. KEMPER. [Seal]

SALLIE B. KEMPER. [Seal]

Duly acknowledged, and filed for record June 26, 1895.

Then follows certificate by county recorder of Silver Bow County, Montana, to the effect that the foregoing is a true copy of the original as it appears of record at page 203 in Book "14" of Deed, Records of Silver Bow County, Montana.

[Complainant's Exhibit No. 12—Certificate of Incorporation Dated June 13, 1895.]

[1411] (No. 443. In Equity. Compl. Exhibit No. 12. Oliver T. Crane, Examiner.

CERTIFICATE OR INCORPORATION.

The undersigned, citizens of the State of Montana, for the purpose of forming an incorporation, under and by virtue of the laws of said State do hereby certify as follows, to-wit:

First: The name of said corporation shall be the "BUTTE LAND AND INVESTMENT CO."

Second. The object for which said company is formed, is to buy, hold, lease, deal in, improve, and sell real estate; to purchase, hold, lay out, plat, develop, lease, sell, deal in, convey or otherwise use or dispose of townsites or towns or the lots, blocks or subdivisions thereof; to purchase material for, erect, buy, occupy, rent, improve and sell buildings and other improvements on real estate; to construct, own, maintain and operate street railways, water works,

ditches, electric plants and other auxiliary improvements in connection with the company's real estate; to buy, sell, lease, bond, and operate mines; to loan and borrow money and buy and sell and otherwise deal in securities and investments and to perform all necessary acts in developing, improving and dealing in mines, lands, townsites or parts thereof and negotiating and otherwise owning and handling investments and loans.

Third. The amount of the capital stock of said company shall be two hundred thousand (200,000) dollars, divided into twenty thousand (20,000) shares, of the par value of ten (10) dollars each.

Fourth. The said Company shall commence on the fifteenth day of June, in the year one thousand eight hundred and ninety-five and continue in existence for the term of forty (40) years.

Fifth: The number of trustees who shall manage the concerns of said company for the first three months, shall be three and their names are S. V. Kemper, J. W. Kemper and Jas. A. Canty.

Sixth: The operations of said company shall be carried on in [1412] the vicinity of Butte, County of Silver Bow, State of Montana. And the City of Butte shall be the principal place of business of said company.

IN WITNESS WHEREOF, we have this 13th day of June, 1895, placed our hands and seals, in duplicate.

S. V. KEMPER. [Seal]

J. W. KEMPER. [Seal]

JAMES A. CANTY. [Seal]

Duly acknowledged.

Then follows a certificate by the county clerk and recorder that the foregoing is a true copy of the original filed for record in his office June 14, 1895.

[Complainant's Exhibit No. 13—Bargain and Sale Deed Dated May 9, 1910—The Butte Land and Investment Co. and the Washington Butte Mining Company.]

[1413] (No. 443. In Equity. Compl. Exhibit No. 13. Oliver T. Crane, Examiner.)

THIS INDENTURE, Made the 9th day of May, in the year of our Lord one thousand nine hundred and ten, between the Butte Land and Investment Co., a corporation duly organized and existing under and by virtue of the laws of the State of Montana, the party of the first part, and the Washington-Butte Mining Company, a corporation duly organized and existing under and by virtue of the laws of the State of Washington, the party of the second part,

WITNESSETH: That the said party of the first part, for and in consideration of the sum of one and no/100 (\$1.00) Dollars, lawful money of the United States of America, to it in hand paid by the said party of the second part, the receipt whereof is hereby acknowledged, does by these presents grant, bargain, sell, convey and confirm unto the said party of the second part, and to its successors and assigns forever, all those certain lode mining claims situate, lying and being in the County of Silver Bow and State of Montana, described as follows, to wit:

All that portion of the Butte and Boston placer Mining Claim, Survey #3379, situated in Section 16, Township 3 North Range 7 West, described by metes and bounds as follows, to wit: Beginning at the

northwest corner of the ground herein described, which point is Corner No. 1 of said Survey #3379 and the east quarter corner of Section 17, Township 3 North Range 7 West of the Principal Meridian of Montana, thence first course east 818 feet to Corner No. 2; thence second course south 63 degrees 15 minutes east 317.5 feet; thence third course south 77 degrees 12 minutes west 378 feet; thence fourth course south 0 degrees 12 minutes east 600 feet to a point on the south boundary line of said Survey #3379; thence fifth course south 77 degrees 12 minutes west 600.2 feet to corner No. 6 of said Survey #3379; thence sixth course south 12 degrees 48 minutes east 394 feet to corner No. 7; thence seventh course north 87 degrees west 232.5 feet to corner No. 8; thence eighth course north 0 degrees 12 minutes west 1332 feet to corner No. 1, the place of beginning, containing [1414] approximately 19.25 acres.

Together with other mining claims and property.

Together with all and singular the tenements, hereditaments and appurtenances thereunto belonging or in anywise appertaining, as usually had and enjoyed.

To have and to hold all and singular the said premises, with the appurtenances, unto the said party of the second part, its successors and assigns, to their own proper use, benefit and behoof forever. And the said party of the first part does hereby covenant, promise and agree, to and with the said party of the second part, its successors and assigns, that the said party of the first part, at the time of the sealing and delivery of these presents, is lawfully seized in a good, absolute and indefeasible estate of inheritance,

in fee simple, of and in, all and singular the said premises, with the appurtenances, and have good right and lawful authority to grant, bargain, sell and convey the same.

In Witness Whereof, the said party of the first part has hereunto caused its corporate seal to be affixed, and these presents to be signed by its president and attested by its secretary the day and year first above written.

BUTTE LAND AND INVESTMENT CO.

By J. W. KEMPER,

President.

Attest: E. E. SHIELDS,

Secretary.

Duly acknowledged May 9, 1910.

Filed for record Dec. 1st, 1911, and recorded on page 524 of Book 101, Deed, Records of Silver Bow County, Montana.

**[Complainant's Exhibit No. 38—Certificate of Assay
Dated Butte, Montana, December 15, 1911.]**

[1415] (No. 443. In Equity. Compl. Exhibit. No. 38. Oliver T. Crane, Examiner.)

ANACONDA COPPER MINING COMPANY,

General Assay Office.

CERTIFICATE OF ASSAY.

Butte, Montana, Dec. 15, 1911.

Mr. F. A. Linforth, Geol. Dep't.

Marks	Per cent Copper.	Ozs. Silver Per Ton.
B. & B. #1	1.90	0.40
" " " 2	1.70	trace
" " " 3	1.40	trace

J. C. FEBLES,

Assayer.

Filed and entered Apr. 17, 1912. Geo. W. Sproule,
Clerk. By Harry Drumm, Deputy.

**[Complainant's Exhibit No. 39—Certificate of Assay
Dated Butte, Montana, December 20, 1911.]**

[1416] (No. 443. In Equity. Compl. Exhibit No.
39. Oliver T. Crane, Examiner.)

ANACONDA COPPER MINING COMPANY,
General Assay Office.

CERTIFICATE OF ASSAY.

Butte, Montana, Dec. 20, 1911.

Mr. F. A. Linforth, Geol. Dept.

Marks	Per cent Copper	Ozs Silver Per Ton	Dol. Gold Per Ton.
4	0.40	0.30	0.20
5	trace	0.20	trace
6	0.70		

J. C. FEBLES,

Assayer.

Filed and entered Apr. 17, 1912. Geo. W. Sproule,
Clerk. By Harry Drumm, Deputy.

**[Complainant's Exhibit No. 40—Certificate of Assay
Dated Butte, Montana, January 8, 1912.]**

[1417] (No. 433. In Equity. Compl. Exhibit No.
40. Oliver T. Crane, Examiner.)

ANACONDA COPPER MINING COMPANY,
General Assay Office.

CERTIFICATE OF ASSAY.

Butte, Montana, Jan. 8, 1912.

Mr. R. H. Sales,
Geol. Dept.

Marks.		Per-Cent. Copper.	Ozs. Silver Per Ton.	Dol. Gold Per Ton.
B & B#7	Per F. A. L.	1.30	0.80	Trace
" " " 8	" "	1.40	0.40	"
" " " 9	" "	1.00	0.20	"
" " " 10	" "	0.80	0.20	"
" " " 11	" "	0.40	trace	"
" " " 12	" "	0.60	"	"
" " " 13	" "	0.90	0.10	"
" " " 14	" "	5.00	0.30	"
" " " 15	" "	7.40	0.40	"

J. C. FEBLES,
Assayer.

Filed and entered Apr. 17, 1912. Geo. W. Sproule,
Clerk. By Harry Drumm, Deputy.

**[Defendants' Exhibit No. 2—Notice of Location and
Declaratory Statement of Discovery and of
Claim to Quartz Lode Mining Claim.]**

[1418] (No. 443. In Equity. Defts. Exhibit No.
2. Oliver T. Crane, Examiner.)

**NOTICE OF LOCATION AND DECLARATORY
STATEMENT OF DISCOVERY AND OF
CLAIM TO QUARTZ LODGE MINING
CLAIM.**

Pleasant View Lode Mining Claim,
Summit Valley Mining District,
Silver Bow County, State of Montana.

THE UNDERSIGNED, who are citizens of the United States, HEREBY DECLARE AND GIVE NOTICE TO ALL PERSONS CONCERNED, That they have discovered a Vein or Lode within the limits of the claim hereby located, and in said lode a vein or crevice of quartz or ore, with at least one well-defined wall, and that they have this 1st day of April, A. D. 1890, located, and do hereby locate and claim, under and by virtue of Chapter Six, of Title Thirty-two, of the Revised Statutes of the United States, and the laws amendatory thereto, and the laws of the State of Montana, a Mining Claim upon said lode or vein, to be designated and named the Pleasant View Quartz Lode Mining Claim, extending along said vein or Lode 900 feet in an Easterly direction, and 600 feet in a westerly direction from the center of the Discovery Shaft (at which shaft this notice and statement is posted), and 300 feet on each side from the middle or center of said Lode or Vein at the surface;

Comprising in all 1500 feet in length along said Vein or Lode, and 600 feet in width, with all the rights and privileges, as to surface ground, and lodes, and veins or ledges, within the boundaries of said claims, and otherwise, and the metals, minerals and valuable deposits of every kind contained in said veins, lodes, or ledges, or within said boundaries, which are given or allowed by the laws of the United States aforesaid, or of the State of Montana.

THE MINING CLAIM hereby located is situated in Summit Valley Mining District, Silver Bow County, State of Montana, and is midway [1419] between the mouth of Park and Horse Canyons.

THE ADJOINING CLAIMS are the Bullwhacker Claim on the South; ——— Claim on the _____.

THIS LOCATION is distinctly marked on the ground, so that its boundaries can be readily traced by a Post, set at Discovery Shaft, where this notice and statement is posted this first day of April, A. D., 1890, and by substantial posts or monuments of stone at each corner of the claim; and the exterior boundaries of the claim, as marked by said post or monuments, are as follows, to wit:

BEGINNING at the S. W. Cor. which is S. $77^{\circ} 12'$ W. 150 feet from the N. W. Cor. of the Bullwhacker Lode; thence running North 600 feet; thence N. $77^{\circ} 12'$ E. 1500 feet; thence South 600 feet to the north line of Bullwhacker lode; thence South $77^{\circ} 12'$ W. 1500 feet to the place of beginning.

THE UNDERSIGNED intend to hold this claim under and according to the Laws of the United States and of the State of Montana, and to record

this Notice and Statement, under oath, in the County Recorder's Office of said County, as provided by law.

Dated this first day of April, 1890, and signed:

CHAS. S. PASSMORE,

LEVI J. HAMILTON,

Locators and Claimants.

[1420] State of Montana,

County of Silver Bow,—ss.

Charles S. Passmore, being duly sworn, says, that he is of lawful age, and a citizen of the United States, and one of the locators and claimants of the Quartz Lode Claim mentioned and described in the foregoing Notice and Statement of Location and Claim, and the persons whose names are subscribed thereto as the locators and claimants are citizens of the United States, that he knows the contents of said Notice and Statement foregoing, and that the matter and things therein stated are true.

CHAS. S. PASSMORE.

Subscribed and sworn to before me this 5th day of April, 1890.

[Notarial Seal] WILLIAM I. LIPPINCOTT,
Notary Public in and for Silver Bow County, State
of Montana.

Filed for record, April 5, A. D. 1890, at 11 o'clock
A. M.

C. F. BOOTH,

County Recorder.

By T. E. Booth,

Deputy.

(Then follows a certificate of the County Clerk of

Silver Bow County, Montana, that the foregoing is a true copy of the original.)

(Exhibit Endorsed: Filed and entered Apr. 17, 1912. Geo. W. Sproule, Clerk. By Harry Drumm, Deputy. 1.50 Pd.)

[Defendants' Exhibit No. 3—Notice of Location and Declaratory Statement of Discovery and of Claim to Quartz Lode Mining Claim.]

[1421] (No. 443. In Equity. Defts. Exhibit 3. Oliver T. Crane, Examiner.)

**NOTICE OF LOCATION AND DECLARATORY
STATEMENT OF DISCOVERY AND OF
CLAIM TO QUARTZ LODGE MINING
CLAIM.**

Point Pleasant Lode Mining Claim.

Summit Valley Mining District,

Silver Bow County, State of Montana.

THE UNDERSIGNED, who are citizens of the United States, HEREBY DECLARE AND GIVE NOTICE TO ALL PERSONS CONCERNED, that they have discovered a Vein or Lode within the limits of the claim hereby located, and in said lode a vein or crevice of quartz or ore, with at least one well-defined wall, and that they have this 1st day of April, A. D. 1890, located, and do hereby locate and claim, under and by virtue of Chapter Six, of Title Thirty-two, of the Revised Statutes of the United States and the laws amendatory thereto, and the laws of the State of Montana, a Mining Claim upon said Lode or Vein, to be designated and named the Point Pleasant Quartz Lode Mining Claim; extending along said vein or lode 50 feet in an Easterly direction and 1450

feet in a Westerly direction from the center of the Discovery Shaft (at which shaft this notice and statement is posted), and 300 feet on each side from the middle or center of said Lode or Vein at the surface: Comprising in all 1500 feet in length along said vein or lode, and 600 feet in width, with all the rights and privileges, as to surface ground and lodes, and veins or ledges, within the boundaries of said claims, and otherwise, and the metals, minerals and valuable deposits of every kind contained in said veins, lodes, or ledges, or within said boundaries, which are given or allowed by the laws of the United States aforesaid, or of the State of Montana.

THE MINING CLAIM hereby located is situated in Summit Valley Mining District, Silver Bow County, State of Montana, and is about [1422] one-fourth ($\frac{1}{4}$) of a mile north from the mouth of Horse Canyon.

THE ADJOINING CLAIMS are the Pleasant View Claim on the South.

THIS LOCATION IS distinctly marked on the ground, so that its boundaries can be readily traced by a post, set at Discovery Shaft, where this notice and statement is posted this 1st day of April, A. D. 1890, and by substantial posts or monuments of stone at each corner of the claim; and the exterior boundaries of the claim, as marked by said post or monuments, are as follows, to-wit:

BEGINNING at the South West corner Post and running thence northerly 600 feet; thence Easterly 1500 feet; thence Southerly 600 feet; thence West-erly 1500, to the place of beginning.

THE UNDERSIGNED intend to hold this claim under and according to the laws of the United States and of the State of Montana, and to record this Notice and Statement, under oath, in the County Recorder's Office of said County, as provided by law.

Dated this 1st day of April, 1890, and signed.

CHAS. S. PASSMORE,
LEVI J. HAMILTON,
Locators and Claimants.

State of Montana,
County of Silver Bow,—ss.

Charles S. Passmore, being duly sworn, says, that he is of lawful age, and a citizen of the United States, and one of the locators and claimants of the quartz lode mining claim mentioned and described in the foregoing Notice and Statement of Location and Claim, and the persons whose names are subscribed thereto as the locators and claimants are citizens of the United States, that he knows the contents of said Notice and Statement foregoing, and that the matter and things therein stated are true.

CHAS. S. PASSMORE.

Subscribed and sworn to before me, this 11th day of April, 1890.

[Notarial Seal]

OLIVER N. PERRY,
Notary Public.

Filed for record, April 11, A. D. 1890, at 34 min.
past 12 o'clock P. M.

C. F. BOOTH,
County Recorder.
By T. E. Booth,
Deputy.

(Then follows certificate of County Clerk and Recorder that foregoing is full, true and complete copy.)

[Defendants' Exhibit No. 4—Mining Deed Dated April 16, 1891—Levi J. Hamilton and Eliza S. Hamilton and Charles S. Passmore and Susie M. Passmore.]

[1423] (No. 443. In Equity. Defts. Exhibit No. 4. Oliver T. Crane, Examiner.)

MINING DEED.

THIS INDENTURE, Made the sixteenth day of April in the year of our Lord One Thousand Eight Hundred and Ninety-one, Between Levi J. Hamilton and Eliza S. Hamilton, his wife, and Charles S. Passmore and Susie M. Passmore, his wife, all of Butte City, County of Silver Bow and State of Montana, parties of the first part, and Louis M'Clellen Mason of same place, County and State, party of the second part, Witnesseth: That the said parties of the first part, for and in consideration of the sum of One Thousand Dollars, lawful money of the United States of America, to them in hand paid, the receipt whereof is hereby acknowledged, have granted, bargained, sold, remised, released, conveyed and quit-claimed, and by these presents do grant, bargain, sell, remise, release, convey and quitclaim unto the said party of the second part, and to his heirs and assigns forever, an undivided one-eighth ($\frac{1}{8}$) interest of & in all the right, title and interest, estate claim and demands, of said parties of the first part, of, in and to that certain portion, claim and mining right, title and property on those certain ledges veins, lode or

deposits of quartz and other rock in place, containing precious metals of gold, silver, and other metals, and situated in the Summit Valley Mining District, County of Silver Bow, and State of Montana, and described as follows, to-wit: An undivided one-eighth ($\frac{1}{8}$) interest of, in and to the Point Pleasant Quartz Lode Mining Claim, as described in the Notice of Location and Declaratory Statement as recorded with the Clerk and Recorder in Book "H" on Page 331 of Silver Bow County, State of Montana. Also an undivided one-eighth ($\frac{1}{8}$) interest of, in and to the Pleasant View Quartz Lode Mining Claim, as described in Notice of Location and Declaratory Statement as recorded in Book "H" on Page 324 with the Clerk and Recorder of Silver Bow County, State of Montana.

Together with all the dips, spurs and angles, and also all the metals, ores, gold, silver and metal bearing quartz, rock and earth [1424] therein; and all the rights, privileges and franchises thereto incident, appendant and appurtenant, or therewith usually had and enjoyed; and also all the estate, right, title, interest, possession, claim and demand whatsoever, of the said parties of the first part, of, in or to the premises, and every part and parcel thereof.

To have and to hold all and singular the said premises, together with the appurtenances and privileges thereto incident, unto the said party of the second part.

IN WITNESS WHEREOF, the said parties of the first part, have hereunto set their hands and seals

the day and year first above written.

LEVI J. HAMILTON. [Seal]

CHARLES S. PASSMORE. [Seal]

ELIZA S. HAMILTON. [Seal]

SUSIE M. PASSMORE. [Seal]

(Duly acknowledged by all of the grantors.)

Filed and entered Apr. 17, 1912. Geo. W. Sproule,
Clerk. By Harry Drumm, Deputy.

**[Defendants' Exhibit No. 11—Mining Deed Dated
March 14, 1895—Lee Davenport and Minnie
Davenport and Louis Mason.]**

[1425] (No. 443. In Equity. Defts. Exhibit No.
11. Oliver T. Crane, Examiner.)

MINING DEED.

THIS INDENTURE, Made the 14th day of March in the year of our Lord one thousand eight hundred and ninety-five, between Lee Davenport and Minnie Davenport, his wife, of Silver Bow County, Montana, parties of the first part, and Louis Mason, of same place, party of the second part, Witnesseth: That the said parties of the first part, for and in consideration of the sum of One Dollars, lawful money of the United States of America, to them in hand paid, the receipt whereof is hereby acknowledged, have granted, bargained, sold, remised, released, conveyed and quit-claimed and by these presents, do grant, bargain, sell, remise, release, convey and quit-claim unto the said party of the second part and to his heirs and assigns forever, all the right, title and interest, estate, claim and demands of said parties of the first part, of, in and to that certain portion,

claim and mining right, title and property on the Lynnie certain ledge, vein, lode or deposits of quartz and other rock in place, containing precious metals of gold, silver and other metals and situated in the unknown Mining District, County of Silver Bow, and State of Montana, and described as follows, to-wit: An undivided one-eighth ($\frac{1}{8}$) interest in and to the Lynnie Quartz Lode Mining Claim, located about one mile east of the Silver Bow Mill and adjoining the Bullwhacker Lode Mining Claim on the North.

Together with all the dips, spurs and angles, and also all the metals, ores, gold, silver and metal bearing quartz, rock and earth therein; and all the rights, privileges and franchises thereto incident, appendant and appurtenant, or therewith usually had and enjoyed; and also all the estate, right, title, interest, possession, claim and demand whatsoever, of the said parties of the first part of, in or to the premises, and every part and parcel thereof.

To have and to hold, all and singular, the said premises, together with the appurtenances, and privileges thereto incident, [1426] unto the said party of the second part.

IN WITNESS WHEREOF, the said parties of the first part have hereunto set their hands and seals the day and year first above written.

LEE DAVENPORT. [Seal]

MINNIE DAVENPORT. [Seal]

(Duly acknowledged by the grantors.)

Filed and entered Apr. 17, 1912. Geo. W. Sproule,
Clerk. By Harry Drumm, Deputy.

[**Defendants' Exhibit No. 12—Lease and Bond Dated May 2, 1900—Isaac Knoyle and Samuel Kift and Louis Mason.**]

[1427] (No. 443. In Equity. Defts. Exhibit No. 12. Oliver T. Crane, Examiner.)

LEASE AND BOND.

THIS INDENTURE, made and entered into this second day of May, 1900, by and between Isaac Knoyle and Samuel Kift, parties of the first part, and Louis Mason party of the second part, WITNESSETH.

That the said parties of the first part do hereby lease and to mine let unto the said party of the second part the Hornet quartz lode claim, situated in Summit Valley Mining District, Silver Bow County, Montana, and located in Section 16, T. 3 N. R. 7 W., said County, and lying northerly from the Bull Whacker lode claim, for the term of two years from and after the first day of May, 1900.

And the said second party shall have the right to immediately enter upon the said quartz lode claim and to mine and extract ores therefrom and to carry away, sell, dispose of, smelt and convert to his own use all of the ores and minerals which may be extracted during the term of this lease.

That said second party shall do all work and mining in a good and workmanlike manner, and securely timber all openings wherever necessary to the proper protection of the same and to proper mining of said lode claim.

And the said first parties do hereby deliver pos-

session to the whole of said quartz lode claim to the said second party for the purpose of carrying on mining and doing mining work therein under this lease.

As part of this lease, it is further agreed and understood that the said party of the second part shall have a right at any time during the term of this lease to purchase the interests of the parties of the first part in and to said quartz lode claim; and the parties of the first part, in consideration of the said second party taking said lease and of the sum of one dollar in hand paid, do hereby bind themselves to sell and convey unto the said second party, or his assigns, all their right, title and interest in and to said [1428] quartz lode claim, at any time within two years hereafter, and to make, execute and deliver a deed of conveyance conveying their said interests, provided said second party, or his assigns, shall pay to the said first parties, for their right, title and interest in and to said quartz lode claim, at any time within two years hereafter, the sum of five hundred dollars.

IN WITNESS WHEREOF, the said first parties have hereunto set their hands, this second day of May, 1900.

ISAAC KNOYLE.

SAMUEL KIFT.

LEWIS MASON.

(U. S. 50¢ revenue stamp.)

(Duly acknowledged before John W. Cotter,
Notary Public, by grantors.)

I hereby sell, assign and transfer the foregoing

lease and agreement and all of my rights therein and thereunder to R. O. Merriman.

Dated May 2d, 1900.

LEWIS MASON.

(Recorded in Vol. A of Leases, page 457, May 24, 4-08 P. M. 1900. J. E. Moran, Clerk and Recorder, Silver Bow Co., Mont. By H. E. Burke, Dept. \$2.00 Pd.)

For value received, I hereby sell, assign and transfer an undivided one-half interest of, in and to the foregoing lease and agreement and all of my rights therein and thereunder to Louis Mason of Butte, Montana.

Dated May 26, 1900.

R. O. MERRIMAN.

(Duly acknowledged, and recorded on June 2d, Book B, Leases, page 404.)

(Filed and entered Apr. 17, 1912. Geo. W. Sproule, Clerk. By Harry Drumm, Deputy.)

[Defendants' Exhibit No. 13—Declaratory Statement of the Olivia Lode Mining Claim.]

[1429] (No. 443. In Equity. Defts. Exhibit No. 13. Oliver T. Crane, Examiner.)

**DECLARATORY STATEMENT OF THE
OLIVIA LODGE MINING CLAIM.**

NOTICE IS HEREBY GIVEN, That the undersigned, who is citizen of the United States, has discovered a vein or lode of quartz or other rock in place, bearing gold, copper and other valuable deposits, and after said discovery, to-wit, on the 16th day of May, 1900, did locate the said vein or lode as the Olivia Lode Mining Claim, by posting the notice required

by law at the point of discovery.

The general course of the vein is easterly and westerly.

The total length of surface included in said location is Fifteen Hundred feet along the course of the vein, being 325 feet in an easterly direction, and 1175 feet in a westerly direction from the said point of discovery, and the total width of the said surface is six hundred feet, being 300 feet on the North side and 300 feet on the south side of the middle of the vein.

The boundaries of the said location are so distinctly marked upon the ground that they can be readily traced, being more particularly described as follows, to-wit:

Beginning at the northeast corner, which is marked by a post not less than four inches square and four feet six inches in length, set one foot in the ground, marked "Northeast corner No. 1 Olivia Lode," with a mound of earth four feet in diameter by two feet in height around said post; and running thence in a westerly direction 1500 feet to the northwest corner, which is marked by a post not less than four inches square and four feet six inches in length, set one foot in the ground, marked "Northwest corner No. 2 Olivia Lode," with a mound of earth four feet in diameter and two feet in height around said post; and running thence in a southerly direction 600 feet to the southwest corner, which is marked by a post not less than four inches square by four feet six inches in length, set one foot in the ground, marked "Southwest corner No. 3, [1430] Olivia Lode,"

with a mound of earth four feet in diameter and two feet in height around said post; and running thence in an easterly direction 1500 feet to the southeast corner, which is marked by a post not less than four inches square by four feet six inches in length, set one foot in the ground, marked "South-east corner No. 4 Olivia Lode," with a mound of earth four feet in diameter and two feet in height around said post; and running thence in a Northerly direction 600 feet to the place of beginning.

The said claim is situated in Summit Valley Mining District (unorganized) in Silver Bow County, Montana, and measured from discovery point of said claim as an initial point the following natural objects and permanent monuments are distant, as follows, to-wit: New North Pacific Round House is distant about $\frac{3}{4}$ mile in a westerly direction,— is distant — in a — direction. The adjoining claims are as follows, to-wit:

On the north, the Copper Queen Lode Mining Claim;

On the east, the ——— Lode Mining Claim;

On the south, the ——— Lode Mining Claim;

On the west, the ——— Lode Mining Claim.

This claim is situated in Section Sixteen, Township Three N. R. 7 W., Montana Meridian.

For the purpose of perfecting the location of this claim as required by law, the undersigned has heretofore, and within ninety days after posting said notice of location, done or caused to be done the following development work on said claim, to-wit: By sinking a discovery shaft to a depth of ten and $\frac{1}{2}$ (10- $\frac{1}{2}$)

Washington-Butte Mining Company. 1741

feet, and said development work has disclosed a well defined crevice and valuable deposit of ore.

The undivided interest in the above described location claimed by each of the undersigned is indicated by the fraction set after each name.

R. O. MERRIMAN,
Locator and Claimant.

State of Montana,
County of Silver Bow,—ss.

R. O. Merriman being duly sworn on oath says, that he is of lawful age, and the locator and claimant of the mining claim described on the foregoing declaratory statement; that the said location [1431] has been made in good faith; that he has read the said declaratory statement, and knows the contents thereof, and that all the statements therein contained are true.

R. O. MERRIMAN.

Subscribed and sworn to before me this 22d day of May, 1900.

[Notarial Seal] JOHN N. KIRK,
Notary Public in and for Silver Bow County, State
of Montana.

(Filed for record May 24, 1900, and recorded in Book Q, Declaratory Statements, on page 95, Records Silver Bow County, Montana.)

Filed and entered Apr. 17, 1912. Geo. W. Sproule,
Clerk. By Harry Drumm, Deputy.

[Defendants' Exhibit No. 14—Declaratory Statement of the Rabbit Lode Mining Claim.]

[1432] (No. 443. In Equity. Defts. Exhibit No. 14. Oliver T. Crane, Examiner.)

DECLARATORY STATEMENT OF THE RABBIT LODGE MINING CLAIM.

NOTICE IS HEREBY GIVEN, That the undersigned, who is a citizen of the United States, has discovered a vein or lode of quartz or other rock in place, bearing copper and other valuable deposits, and after said discovery, to-wit, on the 8th day of May, 1900, did locate the said vein or lode as the Rabbit Lode Mining Claim by posting the notice required by law at the point of discovery.

The general course of the vein is easterly and westerly.

The total length of surface included in said location is 1500 feet along the course of the vein, being 100 feet in *a* easterly direction, and 1400 feet in a westerly direction from the said point of discovery, and the total width of the said surface is 600 feet, being 300 feet on the north side and 300 feet on the south side of the middle of the vein.

The boundaries of the said location are so distinctly marked upon the ground that they can be readily traced, being more particularly described as follows, to-wit:

Beginning at the north-west corner, which is marked by a post not less than four inches square and four feet six inches in length, set one foot in the ground, marked "North-west corner No. 1 Rabbit

Lode," with a mound of earth four feet in diameter by two feet in height around said post; and running thence in a southerly direction 600 feet to the south-west corner, which is marked by a post not less than four inches square and four feet six inches in length, set one foot in the ground, marked "south-west corner No. 2 Rabbit Lode," with a mound of earth four feet in diameter and two feet in height around said post; and running thence in a easterly direction 1500 feet to the south-east corner, which is marked by a post not less than four inches square by four feet six inches in length, set one foot in the ground, marked "south-east corner No. 3 Rabbit Lode," [1433] with a mound of earth four feet in diameter and two feet in height around said post; and running thence in a northerly direction 600 feet to the north-east corner, which is marked by a post not less than four inches square by four feet six inches in length, set one foot in the ground, marked "north-east corner No. 4 Rabbit Lode," with a mound of earth four feet in diameter and two feet in height around said post; and running thence in a westerly direction 1500 feet to the place of beginning.

The said claim is situated in Summit Valley Mining District in Silver Bow County, Montana, and measured from Discovery Shaft of said claim as an initial point the following natural objects and permanent monuments are distant, as follows, to-wit:

Rand's Ranch is distant about 2000 ft. in a northerly direction; Columbia Gardens is distant about 4000 ft. in an easterly direction. The adjoining claims are as follows, to-wit:

On the north the Copper Queen Lode Mining Claim;

On the east, the Bertha Lode Mining Claim;

On the south, the Hornet Lode Mining Claim;

On the west, the Placer Application No. 888.

For the purpose of perfecting the location of this claim as required by law, the undersigned has heretofore, and within ninety days after posting said notice of location, done or caused to be done the following development work on said claim, to-wit: Sunk discovery shaft 3 ft. by 8 ft. by 10 ft. deep, and said development work has disclosed a well defined crevice and valuable deposit of ore.

The undivided interest in the above described location claimed by each of the undersigned is indicated by the fraction set after each name.

R. O. MERRIMAN,

Locator and Claimant.

[1434] State of Montana,
County of Silver Bow,—ss.

R. O. MERRIMAN, being first duly sworn, on oath says, that he is of lawful age, and the locator and claimant of the mining claim described in the foregoing declaratory statement; that the said location has been made in good faith; that he has read the said declaratory statement, and knows the contents thereof, and that all the statements therein contained are true.

R. O. MERRIMAN.

Subscribed and sworn to before me this 8th day of May, A. D. 1900.

[Notarial Seal] LEWIS A. SMITH,
Notary Public in and for Silver Bow County, State
of Montana.

(Filed for record May 9th, A. D. 1900, and recorded in Book Q of Declaratory Statements, on page 94, Records of Silver Bow County, Montana.)

Filed and entered Apr. 17, 1912. Geo. W. Sproule,
Clerk. By Harry Drumm, Deputy.

[Defendants' Exhibit No. 15—Declaratory Statement of the Hope Lode Mining Claim.]

[1435] (No. 443. In Equity. Defts. Exhibit No. 15, Oliver T. Crane, Examiner.)

**DECLARATORY STATEMENT OF THE HOPE
LODE MINING CLAIM.**

NOTICE IS HEREBY GIVEN, that the undersigned who is a citizen of the United States has discovered a vein or lode of quartz or other rock in place, bearing gold, copper and other valuable deposits, and after said discovery, to-wit, on the 13th day of May, 1900, did locate the said vein or lode as the "HOPE" Lode Mining Claim, by posting the notice required by law at the point of discovery.

The general course of the vein is Easterly and Westerly.

The total length of surface included in said location is Fifteen Hundred feet along the course of the vein, being 550 feet in an easterly direction, and 950 feet in a westerly direction from the said point of discovery, and the total width of the said surface is

600 feet, being 300 feet on the north side and 300 feet on the south side of the middle of the vein.

The boundaries of the said location are so distinctly marked upon the ground that they can be readily traced, being more particularly described as follows, to-wit:

Beginning at the north-east corner, which is marked by a post not less than four inches square and four feet six inches in length, set one foot in the ground, marked "Northeast corner No. 1 Hope Lode," with a mound of earth four feet in diameter by two feet in height around said post; and running thence in a westerly direction 1500 feet to the North-west corner, which is marked by a post not less than four inches square and four feet six inches in length, set one foot in the ground, marked "Northwest corner No. 2 Hope Lode," with a mound of earth four feet in diameter and two feet in height around said post; and running thence in a southerly direction 600 feet to the southwest corner which is marked by a post not less than four inches square by four feet six inches in length, set one foot [1436] in the ground, marked "South-west corner No. 3 Hope Lode," with a mound of earth four feet in diameter and two feet in height around said post; and running thence in an easterly direction 1500 feet to the south-east corner, which is marked by a post not less than four inches square by four feet six inches in length, set one foot in the ground, marked "South-east corner No. 4, Hope Lode," with a mound of earth four feet in diameter and two feet in height around said post; and running thence in a northerly direction 600 feet to

the place of beginning.

The said claim is situated in Summit Valley Mining District (unorganized) in Silver Bow County, Montana, and measured from Point of Discovery of said claim as an initial point the following natural objects and permanent monuments are distant, as follows, to-wit:

New Northern Pacific Round House is distant $\frac{3}{4}$ mile in a westerly direction; Brundy's house is distant about 2000 in a southerly direction. The adjoining claims are as follows, to-wit:

On the northeast the Bertha Lode Mining Claim;

On the east, the ——— Lode Mining Claim;

On the south, the Bull Whacker Lode Mining Claim;

On the west, the ——— Lode Mining Claim;

This claim is situated in Section Sixteen, Township Three N., R. 7 W., Montana Meridian.

For the purpose of perfecting the location of this claim as required by law, the undersigned has heretofore, and within ninety days after posting said notice of location, done or caused to be done the following development work on said claim, to wit: Discovery Shaft sunk $22\frac{1}{2}$ feet, and said development work has disclosed a well defined crevice and valuable deposit of ore.

The undivided interest in the above described location claimed by each of the undersigned is indicated by the fraction set after each name.

R. O. MERRIMAN,
Locator and Claimant.

[1437] State of Montana,
County of Silver Bow,—ss.

R. O. MERRIMAN, being duly sworn on oath says, that he is of lawful age, and the locator and claimant of the mining claim described in the foregoing declaratory statement; that the said location has been made in good faith; that he has read the said declaratory statement, and knows the contents thereof, and that all the statements therein contained are true.

R. O. MERRIMAN.

Subscribed and sworn to before me this 22nd day of May, 1900.

[Notarial Seal] JOHN N. KIRK,
Notary Public in and for Silver Bow County, State
of Montana.

(Filed for record May 24th, 1900, and recorded in Book Q of Declaratory Statements, on Page 97, Records of Silver Bow County, Montana.)

Filed and entered Apr. 17, 1912. Geo. W. Sproule,
Clerk. By Harry Drumm, Deputy.

**[Defendants' Exhibit No. 16—Mining Deed Dated
May 26, 1900—R. O. Merriman and Rachael
Merriman and Louis Mason.]**

[1438] (No. 443. In Equity. Defts. Exhibit No.
16. Oliver T. Crane, Examiner.)

MINING DEED.

This Indenture, made the 26th day of May, in the year 1900, between R. O. Merriman and Rachael Merriman, his wife, of Butte, Silver Bow County,

Montana, parties of the first part, and Louis Mason, of Butte, Silver Bow County, Montana, party of the second part, Witnesseth: That the said parties of the first part, for and in consideration of the sum of One Dollars, lawful money of the United States of America, to them in hand paid, the receipt whereof is hereby acknowledged, have granted, bargained, sold and conveyed, and by these presents do grant, bargain, sell, remise, release, convey and quitclaim unto the said party of the second part and to his heirs and assigns forever, all that certain portion, claim and mining right, title and property on those certain ledges, vein, lode or deposits of quartz and other rock in place, containing precious metals of gold, silver and other metals, and situated in the Summit Valley Mining District, County of Silver Bow, and State of Montana, and described as follows, to-wit: An undivided one-half ($\frac{1}{2}$) interest in and to the following quartz lode mining claims, to-wit: The "Gulf" quartz lode mining claim; the "Hope" quartz lode mining claim; the "Olivia" quartz lode mining claim; the "Rabbit" quartz lode mining claim,—all of said claims be situated in said Summit Valley (unorganized) Mining District in Silver Bow County, Montana, according to the Declaratory Statements of said claims now of record in the office of the County Clerk and Recorder of Silver Bow County, Montana.

Together with all the dips, spurs and angles, and also all the metals, ores, gold, silver and metal bearing quartz, rock and earth therein; and all the rights, privileges and franchises thereto incident, appendant and appurtenant, or therewith usually had and en-

joyed; and also all the estate, right, title, interest, possession, claim and demand whatsoever, of the said parties of the first part, [1439] of, in or to the premises, and every part and parcel thereof.

To have and to hold all and singular the said premises, together with the appurtenances and privileges thereto incident, unto the said party of the second part.

IN WITNESS WHEREOF, The said parties of the first part have hereunto set their hand and seal the day and year first above written.

R. O. MERRIMAN.

Duly acknowledged by R. O. Merriman, before John N. Kirk, a Notary Public, on May 26, 1900.

Recorded in Vol. 42 of Deeds, Page 406, Nov. 30, 1900, records of Silver Bow County, Montana.

[Defendants' Exhibit No. 17—Mining Deed Dated December 16, 1910—Samuel Kift and Isaac D. Knoyle and Louis Mason and R. O. Merriman.]
[1440] (No. 443. In Equity. Defts. Exhibit No. 17. Oliver T. Crane, Examiner.)

MINING DEED.

THIS INDENTURE, Made the 16th day of December, in the year of our Lord nineteen hundred and ten, between Samuel Kift and Isaac D. Knoyle, parties of the first part, and Louis Mason and R. O. Merriman, parties of the second part, Witnesseth: That the said parties of the first part, for and in consideration of the sum of One (\$1.00) Dollars, lawful money of the United States of America, to them in hand paid, the receipt whereof is hereby acknowledged,

have granted, bargained, sold, remised, released, conveyed and quitclaimed, and by these presents, do grant, bargain, sell, remise, release, convey and quitclaim unto the said parties of the second part, and to their heirs and assigns forever, all the right, title and interest, estate, claim and demands of said parties of the first part, of, in and to that certain portion, claim and mining right, title and property on that certain ledge, vein, lode or deposits of quartz and other rock in place, containing precious metals of gold, silver and other metals, and situated in the Summit Valley Mining District, County of Silver Bow, and State of Montana, and described as follows, to-wit:

The Hornet quartz lode claim, situate, lying and being in Section 16, Township 3 North, Range 7 West, and lying northerly from the Bullwhacker lode claim, located March 19th, 1900, and recorded on page 384, Book "T," and page 213, Book "U," Lode Records of Silver Bow County, Montana.

Together with all the dips, spurs and angles, and also all the metals, ores, gold, silver and metal-bearing quartz, rock and earth therein; and all the rights, privileges and franchises thereunto incident, appendant and appurtenant, or therewith usually had and enjoyed; and also all the estate, right, title, interest, possession, claim and demand whatsoever, of the said parties of the first part, [1441] of, in or to the premises, and every part and parcel thereof.

To have and to hold, all and singular, the said premises, together with the appurtenances and priv-

ileges thereunto incident unto the said parties of the second part.

IN WITNESS WHEREOF, the said parties of the first part have hereunto set their hands and seals the day and year first above written.

SAMUEL KIFT. [Seal]

ISAAC D. KNOYLE. [Seal]

Duly acknowledged by Samuel Kift and Isaac Knoyle on Dec. 16, 1910, before Louis P. Sanders, a Notary Public.

Recorded at page 415 of Book 55 of Deeds, Records of Silver Bow County, Montana.

Filed and entered Apr. 17, 1912. Geo. W. Sproule, Clerk. By Harry Drumm, Deputy.

[Defendants' Exhibit No. 18—Ore Statement Dated Butte, Montana, October 22, 1900.]

[1442] (No. 443. In Equity. Defts. Exhibit No. 18. Oliver T. Crane, Examiner.)

ORE STATEMENT.

MONTANA ORE PURCHASING COMPANY.

Butte, Mont., Oct. 22, 1900.

GULF ORE, For Account of D. L. Merriman.

Date Received Oct. 17; Lot 6653; Assay Copper per cent, 34.4; Gross Pounds, 2475; Moisture, per cent, 4.5; pounds, 108; Sacks No. 38, Lbs. 76; net tons 1.145; Price per ton, 68.68;

Total Value,	78.63
Less Sampling,	10.00

68.63

Washington-Butte Mining Company. 1753

Basis Settlement: 2.20 per unit for copper; less 7.00 per ton treatment.

R. A. CARNOCHAN.

MONTANA ORE PURCHASING CO.

Per BAGLIN.

Filed and entered Apr. 17, 1912. Geo. W. Sproule, Clerk. By Harry Drumm, Deputy.

Defendants' Exhibit No. 19—Ore Statement Dated Butte, Montana, December 28, 1900.]

[1443] (No. 443. In Equity. Defts. Exhibit No. 19. Oliver T. Crane, Examiner.)

ORE STATEMENT.

MONTANA ORE PURCHASING COMPANY.

Butte, Mont. Dec. 28, 1900.

GULF ORE, For Account of Mason & Merriman.

Date Received, Dec. 23; Lot 6814; Assay, Silver Oz. 0.6; copper per cent, 8.8; Weight, gross pounds, 20075; moisture, per cent, 7.0; Pounds, 1405; Net Tons, 9.335; Price per Ton, 12.36; Total Value, 115.38.

Basis of Settlement: 2.20 Per Unit for Copper, Less 7.00 Per Ton Treatment.

W. D. WHEELER.

MONTANA ORE PURCHASING CO.

Per GEO. BAGLIN.

Filed and entered Apr. 18, 1912. Geo. W. Sproule, Clerk. By Harry Drumm, Deputy.

**[Defendants' Exhibit No. 20—Ore Statement Dated
Butte, Montana, November 17, 1900.]**

[1444] (No. 443. In Equity. Defts. Exhibit No.
20. Oliver T. Crane, Examiner.)

ORE STATEMENT.

MONTANA ORE PURCHASING COMPANY.

Butte, Mont., Nov. 17, 1900.

GULF ORE, For Account of Mason & Merriman.

Date Received, Nov. 12; Lot 6714; Assay, Silver Oz.
0.9; Copper per cent, 6.4; Weight, Gross Pounds,
17450; Moisture, per cent, 9.0; Pounds, 1571;
Net Tons, 7.939; Price per ton, 7.60; Total
Value, 60.33.

Basis of Settlement: 90 Per Cent of Silver at 64
per ounce. 2.20 Per Unit for Copper. Less 7.00
Per Ton Treatment.

BEN K. COSBY.

MONTANA ORE PURCHASING CO.

Per **GEO. BAGLIN.**

Filed and entered Apr. 17, 1912. Geo. W. Sproule,
Clerk. By Harry Drumm, Deputy.

**[Defendants' Exhibit No. 53—Assayer's Certificate
Dated Butte, Montana, December 20, 1911.]**

[1445] (No. 443. In Equity. Defts. Exhibit No.
53. Oliver T. Crane, Examiner.)

THE ROMBAUER ASSAY CO.,

Assayers and Chemists,

56 East Granite Street,

W. R. Hocking Manager, Butte, Montana.

Dec. 20, 1911.

C. C. Clark.

Samples Taken by E. E. Watson.

SiO	Cu
1 85.4	1.95
2 85.3	3.00
3 87.5	2.3
4 84.71	3.2
5 69.5	9.5
6 95.5	.4
7 88.3	.45
8 85.9	2.85
9 89.9	.65
10 84.0	6.3
11 80.2	9.0
12 73.4	7.1
13 72.0	10.9
14 92.4	.7
15 89.1	2.2
16 86.8	2.05

Respectfully,

W. R. HOCKING.

Filed and entered Apr. 17, 1912. Geo. W. Sproule,
Clerk. By Harry Drumm, Deputy.

[Defendants' Exhibit No. 61—Bargain and Sale Deed Dated February 19, 1901—Louis Mason and Anna Mason and R. O. Merriman and Rachael A. Merriman.]

[1446] (No. 443. In Equity. Defts. Exhibit No. 61. Oliver T. Crane, Examiner.)

THIS INDENTURE, Made this 19th day of February, in the year One Thousand Nine Hundred and One, between Louis Mason and Anna Mason, his wife, and R. O. Merriman and Rachael A. Merriman, his wife all of the City of Butte, County of Silver Bow, State of Montana, parties of the first part, and L. O. Clark, of the same place, party of the second part, WITNESSETH.

That the said parties of the first part, for and in consideration of the sum of One Dollar, lawful money of the United States, to them in hand paid by the said party of the second part, and certain other valuable considerations contained in a separate agreement of even date herewith, do, by these presents, grant, bargain, sell, remise, release and forever quitclaim unto the said party of the second part, and to her heirs and assigns forever, an undivided five-eighths ($\frac{5}{8}$) interest of, in and to the following described mining properties, to-wit, an undivided five-eighths interest in the "GULF" quartz lode mining claim; an undivided five-eighths interest of, in and to the "Hope" Quartz lode mining claim, an undivided five-eighths interest of, in and to the "Olivia" quartz lode mining claim; an undivided five-eighths interest of, in and to the "Rabbit" quartz lode mining claim;

and an undivided five-eighths interest of, in and to a certain agreement in writing, and lease and bond for the purchase of that certain quartz lode mining claim known as the "Hornet" quartz lode mining claim, which said lease and bond was executed on the second day of May, A. D. 1900, from Isaac Knoyle and Samuel Kift, as lessors, and running to the said Louis Mason and R. O. Merriman as lessees; it being the intention to convey by these presents an undivided five-eighths interest in all of the rights and title which now vests or may hereafter accrue in the said Louis Mason and R. O. Merriman of, in and to that certain quartz lode mining claim known as the "Hornet," by virtue of the said bond heretofore referred to.

All of which said lode mining claims are situated in Section [1447] Sixteen, Township Three North, Range Seven West, in Summit Valley Mining District, Silver Bow County, State of Montana.

Together with an undivided five-eighths interest in and to all the dips, spurs, and angles, and also all the metals, ores, gold, silver and copper bearing rock and earth therein, and all the rights, privileges and franchises thereto incident, appendant and appurtenant, or therewith usually had and enjoyed; and also all and singular the tenements and hereditaments and appurtenances thereto belonging or in anywise appertaining, and the rents, issues and profits thereof.

TO HAVE AND TO HOLD all and singular the said premises, together with the appurtenances and privileges thereto incident, unto the said party of the second part, her heirs and assigns, forever.

IN WITNESS WHEREOF the said parties of the first part have hereunto set their hands this nineteenth day of February, A. D. 1901.

LEWIS MASON.

ANNA MASON.

R. O. MERRIMAN.

RACHAEL A. MERRIMAN.

(U. S. Revenue Stamps 50¢.)

Duly acknowledged. Filed for record and recorded Feb. 19, 1901, at page 54, of Book 47 of Deeds, Records of Silver Bow County, Montana.

Filed and entered Apr. 17, 1912. Geo. W. Sproule, Clerk. By Harry Drumm, Deputy.

**[Defendants' Exhibit No. 70—Assayer's Certificate
Dated Butte, Montana, June 2, 1903.]**

[1448] (No. 443. In Equity. Defts. Exhibit 70.
Oliver T. Crane, Examiner.)

GEORGE H. SEE,

Assayer and Chemist.

Butte, Montana, June 2, 1903.

Mr. John Stafford: Your 3 Hand Samples Assayed
as follows:

	Oz. Per Ton. Silver.	Per Cent. Copper.
No. 1 W. of incline 17 ft. W. of center	Trace	2.4
No. 2 18½ ft. E. of incline	1.04	5.94
No. 1 E. 7 ft. of Center of in- cline	trace	21.6

Charges \$3.00.

Respectfully submitted,

GEO. H. SEE,

Assayer.

Filed and entered Apr. 17, 1912. Geo. W. Sproule,
Clerk. By Harry Drumm, Deputy.

**[Defendants' Exhibit No. 71—Assayer's Certificate
Dated Butte, Montana, December 16, 1911.]**

[1449] (No. 443. In Equity. Defts. Exhibit No.
71. Oliver T. Crane, Examiner.)

THE ROMBAUER ASSAY CO.,

Assayers and Chemists,

Butte, Montana, Dec. 16, 1911.

C. C. Clark: Your samples assayed as follows:

Samples Taken by John Stafford.

	Ozs. Silver Per Ton.	Per Cent. Copper.	Per Cent. Silica.
#1 10 ft. N of Hornet Shaft	0.5	56.96	23.4
#2 15 ft. “ “ “	0.5	49.16	33.5
#3 Mouth of 1st X-cut 18 ft. from discovery surface	0.2	15.92	63.1
#4 28 ft. from surface, Disc.	Tr.	5.70	79.2
#5 24 ft. N of Discovery shaft in X-cut	0.6	40.38	38.4

Respectfully,

W. R. HOCKING.

Filed and entered Apr. 17, 1912. Geo. W. Sproule,
Clerk. By Harry Drumm, Deputy.

**[Defendants' Exhibit No. 72—Assayer's Certificate
Dated Butte, Montana, December 18, 1911.]**

[1450] (No. 443. In Equity. Defts. Exhibit No.
72. Oliver T. Crane, Examiner,)

THE ROMBAUER ASSAY CO.,

Assayers and Chemists,

Butte, Montana, Dec. 18th, 1911.

Mr. C. C. Clark: Your Sample Assayed as follows:

Samples Taken by John Stafford.

		Per Cent Copper.	Per Cent Silica.
#1	Rabbit Disc. Shaft 11 ft. from surface,	15.40	47.4
#2	Rabbit Tunnel foot-wall streak about 1 ft. wide	11.30	65.5
#3	Rabbit Tunnel 33 ft. from 1st cross-cut	2.39	89.1

Respectfully,

W. R. HOCKING.

Filed and entered Apr. 17, 1912. Geo. W. Sproule,
Clerk. By Harry Drumm, Deputy.

[Defendants' Exhibit No. 89—Assayer's Certificate
Dated Butte, Montana, December 18, 1911.]

[1451] (No. 443. In Equity. Defts. Exhibit No.
89. Oliver T. Crane, Examiner.)

THE ROMBAUER ASSAY CO.,

Assayers and Chemists,

W. R. HOCKING, MGR.

Butte, Montana, Dec. 18th, 1911.

Mr. Sam Barker: Your Samples Assayed as follows:

	Ozs. Silver per ton.	Per Cent Copper.
#1 Sample of Streak at bot- tom of Hornet disc. shaft	.1	.44
#2 Sample from XCut North from bottom of Hornet Disc. Shaft	.3	1.70

Respectfully,

W. R. HOCKING.

Filed and entered Apr. 17, 1912. Geo. W. Sproule,
Clerk. By Harry Drumm, Deputy.

**[Defendants' Exhibit No. 114—Assayer's Certificate
Dated Butte, Montana, February 2, 1912.]**

[1452] (No. 443. In Equity. Defts. Exhibit No.
114. Oliver T. Crane, Examiner.)

THE ROMBAUER ASSAY CO.

Assayers and Chemists.

W. R. HOCKING, MGR.

Butte, Montana, Feb. 2nd, 1912.

Clark & Mason, by P. A. Stevens.

	Ozs. Silver.	Per Cent. Copper.	Per Cent. Iron.
# 0	0.1	0.12	7.9
#00	0.1	0.16	7.4
# 1	0.1	trace	29.1
# 2	0.1	0.10	28.8
# 3	0.1	0.27	24.1
# 4	0.5	14.55	
# 5	0.1	1.26	
# 6	0.3	9.51	
# 7	0.4	8.25	
# 8	0.4	8.70	
# 9	0.3	6.48	
#10	0.1	1.60	
#11	0.1	1.20	
#12	0.1	2.08	
#13	0.1	2.64	
#14	0.2	6.37	
#15	0.2	5.45	
#16	0.1	2.50	
#17	0.2	6.94	

Respectfully,

W. R. HOCKING.

Filed and entered Apr. 17, 1912. Geo. W. Sproule,
Clerk. By Harry Drumm, Deputy.

[Defendants' Exhibit No. 117—Report on the
Bonanza and Hidden Creek Copper Properties,
by Horace Winchell, Butte, Montana, December,
1902.]

[1453] (No. 443. In Equity. Defts. Exhibit No.
117. Oliver T. Crane, Examiner.)

REPORT ON THE BONANZA AND HIDDEN
CREEK COPPER PROPERTIES.

BY HORACE WINCHELL, BUTTE, MONTANA,
DECEMBER, 1902.

HIDDEN CREEK.

The Hidden Creek property is situated less than two miles from deep water, is surrounded by timber of great growth, near a fine water power, and has an elevation of about 750' above tide.

The ore stands up in bold outcrops and for some time could be quarried and mined in open cuts or benches very cheaply. The ore on the surface is sometimes hard, indeed very solid chalcopyrite and pyrrhotite, and again soft rotted and crumbling granular pyrite, fresh and yellow and but little oxidized.

The developments upon this property at the time of my examination were extremely limited, and the description has reference chiefly to the surface showing. There is a dike of green stone associated with the ore at the Hidden Creek, and it is altogether likely that other dikes occur which were not noticed on the surface. The dike noticed strikes south 20 deg. west, magnetic, dips east about 55 degs., and is

[1456] BONANZA.

LOCATION.

The Bonanza property is situated about half a mile from the Coast of Goose Bay, Observatory Inlet, in British Columbia, just south of the southeastern portion of Alaska. The claims included in this property are the "North Star," "Moana," "Emma," "Bonanza" and "Louis Fraction." These claims are not all full claims. There is also a location on the beach called the "Margaret." The elevation at the property is about 125' above tide. Water power can be developed in abundance from two streams of fresh water called "Mineral Creek" and "Bonanza Creek."

The country is heavily timbered with hemlock, spruce, balsam and cedar; and conditions for operating and economic mining throughout the year could not be improved upon.

GEOLOGY.

The country rock is mica-schist and gneiss, containing dykes of diabase and diorite. The country is much broken and the streams occupy deep gorges. The rocks show recently glaciated and very fresh surface exposures, although schists are much brecciated and altered. Sulphides of iron and copper are frequently seen on the very surface and in the beds of streams, although there is occasionally a surface capping of from a few inches to a foot of oxide of iron, in the shape of gossam. Below this are found solid pyrite, pyrrhotite and chalcopyrite. These minerals are sometimes quite massive in occurrence near the surface, the iron sulphides largely predominating, and are sometimes disseminated in small particles

through the schists.

The crushed, twisted and brecciated schists lie adjacent to the dikes of diabase and diorite and carry the ore which occupies the intestices and cracks between the masses of schist and quartz. These included masses of quartz and rock, are sometimes angular and [1457] sometimes rounded and bear evidences of considerable squeezing and movement. The ore appears to be richer near the surface and to follow the slope of the hills rather than any structural features of the rocks.

A careful observation of the sulphides of iron and copper in the gorges around and upon the Bonanza property makes it perfectly evident that the copper ore is due entirely to superfical concentration, and unless in association with dikes of eruptive rocks, cannot be expected to extend to any considerable depth. Climatic topographic and geological conditions all tend to prevent the concentration of the copper ore in depth, and the formation of rich deposits at any considerable distance below the surface. In fact, most of the tunnels upon the Bonanza property have run through the ore and into solid, almost barren rock at very moderate depths. Sketches of tunnels Numbers 1, 2 and 3, appended to this report, demonstrate the correctness of these statements.

Ore to the amount of perhaps 250 tons has been taken from these workings and thrown on the dumps. This ore might average 6 per cent in copper, and, if present in large quantity, could be mined and treated at a profit. It is evident from the developments, however, that the quantity of such ore is very limited, and the indications are not sufficiently

including the volume to which this certificate is attached, is, within the time allowed by law and the rules of Court and the extensions of time granted by the Court, approved as a true, complete and properly prepared statement of all of the evidence offered and introduced upon the trial and hearing of said case, including all exhibits, excepting maps and tracings, the originals of which the clerk is directed to transmit to the Clerk of the Circuit Court of Appeals; and also excepting the mineral specimens, which are also to be transmitted to the appellate court, at appellants' expense.

Dated this 3rd day of October, 1913.

FRANK S. DIETRICH,

Judge.

Filed October 8th, 1913. Geo. W. Sproule, Clerk.

[Certificate of Clerk U. S. District Court to Transcript of Record, etc.]

[1460] I, Geo. W. Sproule, Clerk of the District Court of the United States, in and for the District of Montana do HEREBY CERTIFY: That the foregoing Transcript on Appeal, in the case of Washington-Butte Mining Company, a Corporation, Complainant and Respondent, against Louis Mason et al., Defendants and Appellants, contains a full, true and correct copy (formal parts only omitted) of all pleadings filed in said case, to wit: The Bill of Complaint, Answer of Defendants, Answer of Washington-Butte Mining Company to Cross-Bill of Defendants, Replication to Defendants' Answer, Replication to Paragraphs One to Five Inclusive of

Complainant's Answer to Defendants' Cross-Bill, Exceptions to Portion of Complainant's Answer to Cross-Bill, Judgment and Decision of Court Sustaining Exceptions to Portions of Complainant's Answer to Cross-Bill, Except as to Paragraphs 6, 17 and 20 of said Answer to Cross-Bill, and Overruling said Exceptions as to said Paragraphs 6, 17 and 20; and Supplemental Answer of Defendant L. P. Forestell; also Decree of the Court, and Decision of the Court; Petition for Appeal and Allowance, Assignment of Errors, Bond on Appeal and Original Citation on Appeal; also a full, true and correct copy of the Transcript and Statement of the Evidence as settled and allowed by the Judge presiding, and of the certificate of approval by said judge, and of all exhibits, excepting maps and tracings and mineral exhibits, the originals of which will be transmitted to the Clerk of the Circuit Court of Appeals as provided by the rules, and in accordance with the direction of the trial Court.

And I further certify that the foregoing Record was prepared by the Appellants, at their own expense, and that Two hundred and nineteen 65/100 Dollars, is the cost of comparing the said record, and that said amount has been paid to me by Appellants.

In Witness Whereof, I have hereunto set my hand and affixed the [1461] seal of this court this 8th day of October, in the year A. D. 1913.

[Seal]

GEO. W. SPROULE,

Clerk of the District Court of the United States, in
and for the District of Montana.

[Endorsed]: No. 2323. United States Circuit Court of Appeals for the Ninth Circuit. Louis Mason, L. O. Clark, Johanna Farlin, C. C. Clark, L. P. Forestell, A. F. Bushnell, John Dolan, Pat Lerous, J. T. Fitzgerald and Elizabeth Brown, Appellants, vs. Washington-Butte Mining Company, a Corporation, Appellee. Transcript of Record. Upon Appeal from the United States District Court for the District of Montana.

Received and filed October 14, 1913.

FRANK D. MONCKTON,
Clerk of the United States Circuit Court of Appeals
for the Ninth Circuit.

By Meredith Sawyer,
Deputy Clerk.

*In the United States Circuit Court of Appeals for
the Ninth Circuit.*

LOUIS MASON et al.,

Appellants,

vs.

WASHINGTON-BUTTE MINING COMPANY,
Appellee.

**Petition [for Order Extending Time to Docket
Cause in Appellate Court].**

Come now the above-named appellants and petition the Court for an order extending the time in which to docket the above-entitled case with the Clerk of the above-entitled court, for the reason that the narrating and settling of the testimony to be used on the appeal of the above-entitled cause has consumed

an extraordinary amount of time and necessitated unusual labor, and by reason thereof, appellants will be unable to docket said cause on the date fixed in the citation, to wit, July 30, 1913.

And your petitioners will ever pray.

WALSH, NOLAN & SCALLON,
Solicitors for Appellants.

[Endorsed]: No. 2323. U. S. Circuit Court of Appeals, Ninth Circuit. Louis Mason et al., Appellants, vs. Washington-Butte Mining Company, Appellee. Petition. Filed Jul. 24, 1913. F. D. Monckton, Clerk. Refiled October 14, 1913. F. D. Monckton, Clerk.

*In the United States Circuit Court of Appeals for
the Ninth Circuit.*

LOUIS MASON et al.,

Appellants,

vs.

WASHINGTON-BUTTE MINING COMPANY,
Appellee.

**Order [Enlarging Time to August 30, 1913, to File
Record Thereof and to Docket Cause in Appel-
late Court].**

On reading and filing the petition of the above-named appellants this day filed herein, praying an enlargement of the time in which to file a record of the above-entitled cause and docket the case with the Clerk of this Court, for good cause shown;

IT IS ORDERED: That the time in which the above-named appellants shall file a record of the

above-entitled cause and docket the case with the clerk of this Court at San Francisco, California, be, and the same hereby is, enlarged and extended to and including the 30th day of August, 1913.

Dated July 24, 1913.

By the Court:

WM. W. MORROW,
U. S. Circuit Judge.

[Endorsed]: No. 2323. U. S. Circuit Court of Appeals, Ninth Circuit. Louis Mason et al., Appellants, vs. Washington-Butte Mining Company, Appellee. Order. Filed Jul. 24, 1913. F. D. Monckton, Clerk. Refiled Oct. 14, 1913. F. D. Monckton, Clerk.

*In the United States Circuit Court of Appeals for
the Ninth Circuit.*

LOUIS MASON et al.,

Appellants,

vs.

WASHINGTON-BUTTE MINING COMPANY,
Appellee.

**Petition [for Further Extension of Time to Docket
Cause in Appellate Court].**

Now come the above-named appellants and petition the Court for an order further extending the time in which to docket the above-entitled case with the Clerk of the above-entitled court, for the reason that the approval of the statement of the evidence in said cause cannot be secured in such

time as to make possible the docketing of said cause within the date now fixed, to wit, August 30, 1913.

And your petitioners will ever pray.

J. A. POORE,
WALSH, NOLAN & SCALLON,
Attorneys for Appellants.

*In the United States Circuit Court of Appeals for
the Ninth Circuit.*

LOUIS MASON et al.,

Appellants,

vs.

WASHINGTON-BUTTE MINING COMPANY,
Appellee.

**Affidavit [of C. B. Nolan in Support of Petition for
Extension of Time to Docket Cause in Appel-
late Court].**

C. B. Nolan, being first duly sworn, upon oath, deposes and says: That he is one of the attorneys for the appellants in the above-entitled cause; that in said cause, on the 30th day of June, 1913, an appeal was allowed to the above-entitled court; that contemporaneous with the allowance of said appeal, a statement of the evidence reduced to narrative form was filed with the Clerk of the District Court of the District of Montana, where said cause was tried, and a copy thereof, at said time, was served upon the attorneys for appellee; that the statement, so prepared, was voluminous, containing in the neighborhood of twelve hundred typewritten pages of testimony, and the statement so prepared was a condensation of testimony by question and answer

of over thirty-six hundred pages; that upon the deposition of said statement with the Clerk, a notice was served upon the attorneys for appellee that said statement should be presented for allowance on the 24th day of July, 1913; that within the time named, the appellee presented amendments to the statement so submitted, which appellants object to.

Affiant further says that Judge Bourquin, now the judge of said court, was one of the attorneys who tried said cause, and is disqualified from acting therein; that on the 8th day of August, 1913, an order was duly made in the United States District Court, setting forth the fact that the presiding Judge of said court was disqualified, and thereupon on said date a communication was addressed to the Hon. William B. Gilbert, one of the Circuit Judges of the Ninth Circuit, advising him of the disqualification of said judge.

Affiant further says that the Hon. Frank S. Dietrich, Judge of the District Court of Idaho, tried said cause, and as affiant is informed, has been designated to approve said statement, and that the statement, with the amendments, was forwarded to him at Boise City, Idaho, on the 14th day of August, 1913; that the consideration of said statement may consume considerable time, and affiant believes that the said statement will not be settled and allowed in seasonable time, so that said cause can be docketed with the Clerk of the Circuit Court of Appeals on or before the 30th day of August, 1913, which is the time now fixed within which said cause should be docketed.

Washington-Butte Mining Company. 1777

Affiant further says that if said Judge Dietrich promptly takes up the matter of the allowance of said statement, an extension of time to the 30th day of September, might suffice, but, realizing that some little time may occur in connection with the settlement and allowance of said statement, affiant believes that an extension of time in which to docket said cause should be granted up to and including the 15th day of October, 1913.

And further affiant saith not.

C. B. NOLAN.

Subscribed and sworn to before me this 16th day of August, 1913.

[Seal]

J. R. WINE, Jr.,

Notary Public for the State of Montana, Residing at
Helena, Montana.

My commission expires Nov. 13, 1914.

[Endorsed]: No. 2323. U. S. Circuit Court of Appeals, Ninth Circuit. Louis Mason et al., Appellants, vs. Washington-Butte Mining Co., Appellee. Petition and Affidavit. Filed October 14, 1913. F. D. Monckton, Clerk.

*In the United States Circuit Court of Appeals, for
the Ninth Circuit.*

LOUIS MASON et al.,

Appellants,

vs.

WASHINGTON-BUTTE MINING COMPANY,
Appellee.

**Order [Extending Time to October 15, 1913, to
Docket Cause in Appellate Court].**

On reading and filing the petition of the above-named appellants this day filed herein, and considering the affidavit upon which the petition is based, said petition praying for a further extension of time in which to file and docket said cause with the Clerk of said Court, and good cause being shown;

IT IS ORDERED, That the time in which said cause shall be filed and docketed with the Clerk of this Court at San Francisco, California be, and the same is hereby, extended to and including the 15th day of October, 1913.

Aug. 25, 1913.

By the Court:

WM. W. MORROW,

Judge of the United States Circuit Court of Appeals
for the Ninth Circuit.

[Endorsed]: No. 2323. U. S. Circuit Court of Appeals, Ninth Circuit. Louis Mason et al., Appellants, vs. Washington-Butte Mining Co., Appellee. Order Under Rule 16 Enlarging Time to Oct. 15, 1913, to File Record Thereof and to Docket Case. Filed Aug 25, 1913. F. D. Monckton, Clerk. Re-filed Oct. 14, 1913. F. D. Monckton, Clerk.

